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RICHARD H. EDMONDS, President.
THOMAS P. GRASTY, Vice-President.

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BALTIMORE, DECEMBER 25, 1902.

COPY FOR ADVERTISEMENTS.

Advertising copy (changes or new advertisements) should reach us Saturday Morning to insure insertion in the issue of the following week.

For the first issue in the month we should receive copy by Friday Morning of the week preceding.

Mr. A. D. Reynolds of Bristol, Tenn., in renewing his subscription to the Manufacturers' Record, writes:

I feel that you are to be congratulated on being able to furnish such reading matter as is calculated to interest the most busy men, especially those who feel an interest in the progress of our Southern country.

COL. J. B. KILLEBREW.

Col. J. B. Killebrew, active for nearly half a century in the work of Southern development, has resigned from the land and immigration department of the Nashville, Chattanooga & St. Louis Railway, and will hereafter be a member of the editorial force of the Manufacturers' Record. For this the South is to be congratulated. In Colonel Killebrew are united in a marked degree thorough acquaintance with a multitude of facts in many fields of Southern endeavor—industrial, agricultural, railroad and educational—scientific training and a broad practical experience. A graduate of the University of North Carolina and trained to the law, he has found time amid many demands of other kinds to engage in successful and progressive agriculture, giving thousands of others the benefit of his own work through the editorship of one of the leading agricultural papers of the South and through contributions to a number of other journals. He has served as superintendent of public instruction for Tennessee and as an agent of the Peabody fund, and his vigorous canvass of the State in behalf of improved educational methods resulted in the adoption of a general public-school system. Tennessee directly and other Southern States indirectly were benefited also by his services as commissioner of agriculture, and his authorship of several valuable books on grasses, wheat-growing, sheep husbandry and various other topics have become standards. Like his report on the culture and curing of tobacco in the United States, filling 300 pages of one

of the census volumes of 1880. His studies of tobacco have since been elaborated in another volume of a more comprehensive character, which is undoubtedly the greatest work of its kind in the country. Colonel Killebrew has written much of the phosphates of Tennessee, and his extended sketch of the progress of agriculture in the South since the war, published in the anniversary issue of the Manufacturers' Record, is a document upon which heavy drains must be made by anybody seeking to write the history of the South during that period. Readers of the Manufacturers' Record are already well acquainted with Colonel Killebrew's graceful and entertaining treatment of a vast variety of subjects connected with Southern progress, and they are to be congratulated that they are to have from his pen a greater supply of such matter than ever before.

Colonel Killebrew has for several years been a contributor to the Southern Farm Magazine, published by the Manufacturers' Record Publishing Co., and now as an active member of its editorial staff he will give much attention to the advancement of the agricultural interests of the South.

Advertisements of Southern localities offering special advantages for the location of manufacturing enterprises will be found on pages 54 and 55.

NOT A TIME FOR TIMIDITY.

Among the letters recently received by the Manufacturers' Record expressing the views on the business outlook of representative American manufacturers was one from the manager of a leading iron and steel industry. He wrote that the outlook of his company's trade could not be more promising, but he added:

If our political agitators for buncos and the labor agitators for soft snaps, who live fat on the proceeds that they rob the laborer of, would cease their agitation for shorter hours and higher pay, the greatest disturbing factor that threatens our present prosperity would be removed and the present prosperous conditions now existing would continue for some time to come. If the great masses of the people of this country would send representative business men to Congress and their legislatures instead of political agitators, the business interests of the country and the labor interests also would fare much better by continued prosperity, but with both of these kinds of agitators constantly keeping this strife to the forefront, the employer of few or many employees is constantly obliged to accede to their frequent demands, necessarily adding to the cost of production, until consumption will naturally cease, and that of necessity will bring about the very conditions that all so much dread. As an example, nothing could have brought about the present conditions in the fuel market, with prices so much out of reach of the great masses of the people, that exists today except the political and labor agitators. From our standpoint we can see no danger signal in the business horizon in the near future except it be from the two disturbing factors above named. You will, of course, understand that we do not wish to bring ourselves before the country as a kicker against labor commanding fair compensation for their services, and if you care to put this reply to your request in print, we would request that you withhold our name and address.

In deference to the request of the writer of this letter we have withheld his name and address. But the letter is published for the purpose of emphasizing a suggestion that greater boldness on the part of large employers of labor in making public over their own names their views based upon practical experience of what is best for wage-earners, the victimizing of the workers of the country by political agitators would be reduced to the minimum, and labor and capital would have a grateful relief, while clogs would be removed from American progress. This letter is a complement to the statement by Hon. Hilary A. Herbert in opposition to the eight-hour law now before Congress, that there are few men in the House of Representatives willing to take the responsibility of opposing any labor measure, no matter whether they approved it or not, lest they be set down as enemies to the laboring class. This explains, he said, why this bill and preceding bills like it even worse than it is passed the House by large majorities.

About the worst enemy to the "laboring class" is the lawmaker who votes for any "labor" measure in Congress, State legislatures or city councils whether or not he approves of such measures. The mass of such measures are not intended for the benefit of a majority of laboring men of the country, but are fathered and furthered by a class whose smallness is equalled only by their compactness—who assert that they alone are the laboring men. Their noisy demonstrations, backed by their boycott in various forms, have magnified their importance beyond all reason. For the good of this class, and for the good of the millions of American employees, employers should take a bold stand, and should not only express their convictions for publication, but should make it impossible for any man to be selected as a representative of an American community who will dare to support legislation of which he does not approve.

SELF-REFLECTING.

The Columbia State is incensed at the Charleston News and Courier because the latter has seen fit in wisdom to change its attitude toward the proposed "child-labor" legislation in South Carolina, and it asks impudently:

Has our contemporary made a "deal" with the cotton manufacturers of the Piedmont by which, in return for its change of policy in this matter of child labor, it will receive their assistance?

Intercourse between maligners of Southern cotton manufacturers and the Columbia State have hardly qualified it to set itself up as a critic of any other paper in connection with this dangerous agitation. At the same time its denunciation of the Charleston News and Courier demonstrates that The State naturally fails to comprehend that only fools never change their minds, while its own mental attitude is unconsciously revealed in the assumption, quite common with Southern

"child-labor" agitators, that their opponents must in some way or other be in a "deal" with the manufacturers. Why cannot these opponents be credited with common sense and honesty?

STILL LOOKING TO AMERICA.

The alleged combination of European nations against American industries is not suppressing the demand abroad for American goods. Consul G. H. Jackson, La Rochelle, reports that letters he has received from several countries, including Germany and Italy, show an increased demand for American superphosphates. Three letters alone suggest that 50,000 tons of superphosphates could be placed at once. He also reports many inquiries concerning American shotguns and ammunition used in hunting partridges, little bustards and water fowl. Consul-General W. R. Bigham, reporting upon the high price of bricks at Cape Town, writes that an American who uses a great many bricks in building ice plants in the colony said that he could sell 1,000,000 bricks a week if he had such hard, vitrified bricks as are made in the United States. Rough bricks shipped from England are harder than those manufactured in Cape Colony, but they are more expensive, and Mr. Bigham believes that if some good brick manufacturers close to the coast in New Jersey or Maryland should investigate this matter they would find a large margin for profit. Here are suggestions worth considering.

SOUTHERN FOREST RESERVE.

In his annual report Secretary Wilson of the National Department of Agriculture returns, with additional facts, to his advocacy of the exceedingly important plan for the establishment of a forest reserve in the Southern Appalachians. He makes special mention of the relation of the preservation of the forest to the regulation of rainfall. In his report of 1901 he estimated that the damages resulting from floods in the streams rising in the region designed for the reserve had approximated \$10,000,000 during the year, and that these damages were traceable to the rapid removal of forests from the mountain slopes. Subsequent investigation has shown that during the twelve months ended April, 1902, the flood damages along the streams extending across eight States amounted to \$18,000,000. Secretary Wilson adds:

These examinations also show, as additional results of the deforestation of these mountain slopes, (1) that the water-powers along these streams, which have an aggregate annual value of \$20,000,000 as a basis for manufacturing enterprises, are being gradually, but certainly, destroyed through the increasing irregularity in the flow of the streams; (2) that the soils which are being washed down from these mountain slopes are rendering annually less navigable the Ohio, the Tennessee, the Mississippi and other rivers of these Southeastern States; and (3) that the rate of land erosion on these mountain slopes from which the forest cover has been removed is now as great in a single year as it was during ten centuries

while these slopes were covered with primeval forests.

These facts ought to reinforce the strong arguments for the plan advanced at the recent Asheville convention under the auspices of the Appalachian National Park Association, and should result in the completion at this session of Congress of the legislation which has already made gratifying progress necessary to give the undertaking its start.

DISAPPOINTED, OF COURSE.

C. C. Houston of Atlanta, a promoter of the "child-labor" movement, is naturally indignant that the Georgia assembly should have adjourned with his special "child-labor" measure on the table. He seems to blame the Manufacturers' Record for his predicament. The plight of his bill is a thoroughly deserved one, in view of the attempt to dragoon it through the legislature, and the Manufacturers' Record is perfectly willing to assume all the responsibility for the delay of that measure or of any similar one. Furthermore, it may be asserted that the Manufacturers' Record proposes to continue its campaign against unconstitutional, un-American and socialistic agitation in the South and in the country at large as long as there may be an occasion for it.

At the same time the Manufacturers' Record must refer briefly to one statement in Mr. Houston's double-column yelp in the Atlanta News entitled "Misrepresenting Workingmen of the South." It is merely necessary to mention the primitive and transparent sophistry in endeavor to identify the great mass of workingmen in the South with the leaders in the socialistic propaganda, for many of these leaders, including Mr. Houston, are undoubtedly sincere and at the same time ignorant of the far-reaching tendencies of their movement. But Mr. Houston says that the assertion that labor agitators are preparing to extend their operations among the agricultural workers "is an insult to the intelligence of the people of this section." This attempt undoubtedly is an insult to the intelligence of any people, but the assertion that it is planned is not, as Mr. Houston pretends to believe, that of the Manufacturers' Record, but was made before the United States Industrial Commission by Samuel Gompers, president of the American Federation of Labor, whose cue in this agitation Mr. Houston is representing about as ably as anybody else, and thereby misrepresenting workingmen of the South.

A WISE SUGGESTION ABOUT COMMISSIONS.

In its annual report the Interstate Commerce Commission says:

It is not open to question that the competition between railroad carriers which formerly prevailed has been largely suppressed, or, at least, brought to the condition of effective restraint. The progress of consolidation, in one form or another, will, at no distant day, confine this competition within narrow and unimportant limits, because the control of most railway properties will be merged in a few individuals, whose common interests impel them to act in concert.

While this will insure, as probably nothing else can in equal degree, the observance of published tariffs, and so measurably remove some of the evils which the act was designed to prevent, the resulting situation involves consequences to the public which claim the most serious attention.

A law which might have answered the purpose when competition was relied upon to secure reasonable rates is demonstrably inadequate when that competition is displaced by the most far-reaching and powerful combinations. So great a change in con-

ditions calls for corresponding change in the regulating statute.

One of the chief evils thus removed or minimized is that of the opportunity for the Interstate Commerce Commission to meddle with transportation interests in the country, and about the best change in the regulating statute would be the repeal of the section providing for the appointment of the Interstate Commerce Commission. Such a repeal might happily be made by Congress a precedent for the prevention of other commissions appointed to pacify hasty public opinion and supposed to exercise powers which the Constitution has distinctly imposed upon regular departments of the government.

POSSIBLE DANGER IN THE SOUTHERN EDUCATION SCHEME.

When the Southern Education scheme was launched last spring, with its talk of millions to be spent in the South, one great objection raised against it, and based upon the statements of some of its leading friends, was that it appeared to insist upon a like education for blacks and whites. Since the talk about it has been revived the same objection is again coming to the front. Last May the Daily Picayune of New Orleans said:

Despite the eminent respectability of this movement, it has not been received by the Southern people with the confidence it merits, and for a very plain and simple reason. The people of the Southern States for more than a decade after the Civil War experienced so much and so wantonly vindictive and atrociously evil interference with their political, social and other internal affairs from the hands of their Northern fellow-citizens that they had come to regard with extreme distrust any movement in the Northern States looking to any sort of tampering with the local and domestic problems and interests in the Southern States.

The Picayune then quoted statements of friends of the movement, and, evidently impressed by them, took the ground that "the assistance of enlightened and patriotic citizens in the Northern States should be welcomed" in right education. Since the revival of publicity about the movement and its treatment by many Southern newspapers as if it was an entirely new thing the Picayune reflects a substantial sentiment when it says:

Just what is intended in this movement does not appear, but it seems to have some connection with the operations that have been set on foot recently under the name of the "Southern Education Board," whose chief object seems to be the education of the negroes and that class of whites known in various parts of the South as "Crackers," "Mountaineers," poor whites and the like. The incorporators of the Washington movement are much the same as the gentlemen engaged in the Southern educational enterprise, and the two concerns may have more or less connection.

The adoption by several of the Southern States of constitutions which exclude the ignorant and propertyless negroes from the ballot in public elections has attracted a great deal of attention and aroused much feeling in many quarters. Just as long as the illiterate and shiftless negroes were allowed the legal right of suffrage in public elections nobody in the Northern States, with the exception of a few sentimentalists, seemed to care or to give a thought for the illiteracy of the blacks.

But when the educational and property tests were inserted in Southern State constitutions and made ability to read and write conditions of being allowed the privilege of voting, a great sensation was created among Northern people, and particularly the politicians. It made itself manifest in demands that the representation of the Southern States in Congress should be cut down, and bills to that effect have been offered and actively advocated.

Of course, it was fully understood that so long as the negroes remained unlettered they would have to submit to political dictation and domination by the whites; but the idea prevails in many quarters that no such

state of control would be submitted to by educated negroes, and therefore the existing conditions, it is believed, will be wholly changed by the elimination of negro illiteracy, which is to be done by an extensive system of education, so as to accomplish the desired end vastly sooner than would be possible with the limited means which the Southern people, unaided, to educate their illiterate element.

This design to inaugurate a great movement to educate the Southern negroes has been favorably received by not a few Southern educators of prominence, but in order to make the scheme more attractive, there has been incorporated in it the proposition also to educate the large illiterate white population of the South, the numbers of which, although large, are small in comparison with those of the illiterate negroes.

In several of the Southern States the negroes who have reached the voting age vastly outnumber the whites, and if all these negroes could read and write they would by that fact become eligible to vote in elections, and upon the assumption that educated negroes would not submit to be controlled by a white minority, it is easily seen that negro domination, so carefully provided against in these Southern States, would again become a possibility and a danger.

This Southern education movement has attracted but little attention, for the reason that it seemed to have no money of consequence behind it, and was intended more to arouse interest in the subject than to commence any practical operations. The story mentioned above as coming from Washington may have no real foundation, but should it prove to be soundly based it would acquire a large significance if it could be connected with the movement to educate the Southern negroes. * * * This may be a most benevolent and generous and self-sacrificing enterprise, but in view of the fact that this is an age in which every social, political and financial force is being organized and centralized, why should not this be done with education, so that it can be directed to certain ends to accomplish particular desired results? * * * It is wise to prove all things, and in hailing the benefits of the education that is to be specially dispensed to the negroes and the illiterate whites, it would be wise "to prove all things" while holding fast that which is good.

There is sound reasoning in this, and it presents, indeed, possibilities which certainly have not been in the minds of enthusiastic Southerners who, with no other motive but the good of their section, have lent their support to the scheme, and they may not have occurred to the instigators of it. But they are possibilities worthy of deep, careful and patriotic consideration.

REVIEWING AMERICAN IRON AND STEEL TRADES.

Mr. Alfred Mosley, the liberal-minded and patriotic Englishman who recently piloted through parts of the United States representatives of the labor in British iron and steel industries, announced some months ago to Mr. J. Stephen Jeans, secretary to the British Iron Trade Association and editor of the London Iron and Coal Trades Review, that he attached much importance to foremen and workmen getting correct ideas of the progress being made and the distinguishing conditions that prevailed in the industries of the United States generally. As a guide to that study nothing better could be had than the comprehensive volume, "American Industrial Conditions and Competition," edited by Mr. Jeans and published by the British Iron Trade Association. This volume embodies the reports of Messrs. Ebenezer Parkes of West Bromwich, Axel Sahlin of Millom, Enoch James of Wednesbury and J. Stephen Jeans of London, commissioners of the British Iron Trade Association, who visited the United States a year ago to inquire into the iron, steel and allied industries of this country. Three hundred and ninety pages of the 581 contain the general report on American industrial conditions by Mr. Jeans, dealing with raw materials, labor conditions, organization and administration, transportation

systems, cost of producing iron and steel, manufacture and treatment of finished steel products, trusts and consolidations, the basic-steel industry, collateral industries, some economic problems and the Canadian iron and steel industries, together with twenty-two illuminating appendices. Mr. Sahlin treats of the production of coke and anthracite pig-iron, Mr. James of the steel-works plant and equipment, and Mr. Parkes of the bar and sheet industries and of primary and technical education in the United States.

As well might one attempt to review an encyclopedia as to compress within a printed page an adequate summarization of the contents of this volume, representing the latest opinions of experienced observers and masters in the iron and steel trade. But a few extracts from it may serve to indicate the spirit pervading it. Confessedly visiting the United States to inquire into the sources of American competition with Great Britain, the commission were given most hospitable reception. Mr. Jeans writes:

The Hon. Abram S. Hewitt told the members of the Iron and Steel Institute, when they were the guests of the American Iron Industry in 1890, that they would find the latchstring on every door. We, who were not invited guests, and who were there with the avowed purpose of appropriating all the best ideas and systems we might come across in the course of our wanderings, had exactly the same experience, with one or two exceptions of so trifling a character as hardly to be deserving of notice. Speaking generally, our American friends appeared to be just as ready to impart information as we were glad to receive it, and this is true, not of managers of iron and steel works alone, but of those engaged in allied and collateral industries as well. The perfect candor and absence of reserve, the unqualified readiness with which all questions were answered, the unhesitating consent given to applications for plans and illustrations, and the unmistakable friendliness and cordiality of our reception made it hard to believe that we had not absolutely identical interests, instead of being keen rivals and competitors in almost every market.

The reports of the four commissioners recognize fully the natural advantages as to supplies of material. They weigh carefully the elements of labor, transportation and practice, and, without disparagement of the United States, maintain a hopeful attitude toward British industry. But they do not neglect to criticize supposed competitive facts and to point out the necessity for alertness and energy on the part of their fellow-countrymen. For instance, Mr. Jeans, discussing the recent progress made in Canada in its relation to the industries in the United States, says:

Taking into account the railroad freights to the seaboard of the United States, as well as the increased cost of ocean transfer, it was not naturally expected that the product of the Sydney works would be able to undersell that of any American competitor in the iron centers of Europe. This anticipation has to a certain extent been justified, but it must be remembered that the Canadian pig is bounty-fed, and that commercially the results have not been entirely satisfactory to the company.

At the same time Mr. Jeans is not prepared to accept without qualification the whole American program of optimism, for he writes:

The United States has dreams of becoming the financial center of the world, and there are even those who claim that the scepter has already passed from Lombard street to Wall street; that New York is now the dominant city in all matters of currency and finance, and that London must for the future be content to fill a secondary position. This is not yet the case, whatever it may be in the future. The able finance minister of Russia on a recent occasion declared that, in his opinion, London still remained, and was likely for some time to continue to remain, the world's principal financial center. But whether this be so or not is of secondary importance to the fact that the

absence of a sound system of banking and more or less unsettled views on currency are liable in the future, as in the past, to precipitate and intensify financial panics, which bring serious discredit on American business methods and stability, and create a sense of insecurity which, until removed, must limit the possibilities of sound industrial and commercial expansion, although apparently interfering but little with the ultimate accumulation of visible wealth. As we have also seen, the increase of national expenditure has recently been such as to justify the belief that American industry is likely to have to bear largely-increased taxation in the future.

Mr. Jeans also inquires about the destiny of the vast steel output of the United States, with its capacity for a production ever so much greater than at present, and says:

The fact that the capacity of the American Bessemer and open-hearth steel works at the end of 1901 was 58 per cent, in excess of the output of steel in that year, including works then being constructed, appears to promise a much greater output in the future. That capacity is returned by the American Iron and Steel Association at 21,227,000 tons a year, which is about 3,000,000 tons a year in excess of the largest recorded output in a single year of all the rest of the world, and nearly four times the output of steel by both processes so recently as the year 1896. The world's demands for steel have increased rapidly, and now truly amount to a very considerable figure; but that fact notwithstanding, it would almost appear to be impossible that the United States could consume anything like their present capacity, or even their present actual rate of output, under normal and ordinary conditions. What, then, will happen? Either the output must greatly decline, as did the output of both pig-iron and steel between 1890 and 1895, or the steel manufacturers of the United States must deluge the world with steel at prices that are not likely to be greatly remunerative, in the not far-distant future.

Bearing upon this point are the following words of Mr. Jeans:

It is of importance to the iron trade on both sides of the Atlantic to be able to diagnose as far as possible the duration of the present boom in the American iron trade. Such diagnosis, however, cannot even be attempted without a preliminary ascertainment of the causes of the boom. Is it chiefly due to the increasing substitution of steel for other materials, such as steel for timber in car and in building construction? Or is it due to the expansion of the railway system on an unprecedented scale, to the growing needs of general industry in such large sources of demand as pipe lines, electrical equipment and kindred uses? Whatever the main sources of this extraordinary demand may otherwise be, it is important to bear in mind that a large part of it is due to the activity recently and at present prevailing in equipping new plants and old for an extended scale of production, not in the iron and steel industries alone, but in every other branch of mining and manufacture. Can this phenomenal expansion of industrial resources proceed much farther without a check? That is the problem, the solution of which is of most immediate and most anxious concern.

Closely allied to this problem is the equally pressing and, to Great Britain at all events, engrossing problem of what is likely to happen when the boom of the last three years has come to an end. We shall then be likely to witness a battle of giants as probably never before has taken place in the records of industry. It is difficult to believe that the United States in times of depression can find employment for much over one-half of the vast productive capacity which has been described in these pages, and that now being provided for. This conclusion is fully justified by the experience of the past. We are apt to forget that it is not more than eight years since the pig-iron consumption of the United States fell to little over 7,000,000 tons a year, or considerably less than one-half of that of today. If a productive capacity of 24,000,000 to 26,000,000 tons of pig-iron were brought face to face with a demand for only one-third of that quantity, with a corresponding relation of demand to capacity in all other branches of the iron and steel industries, some strange things would be likely to happen.

It will, of course, be understood that when the capacity of the iron and steel works of the United States is referred to, it is not intended to imply that there is any chance, under any conceivable circumstances, of that capacity being fully utilized at the same period. In all iron-making countries there is always a certain, and in most cases a

considerable, proportion of the existing plant that neither is nor can be utilized for a variety of causes. In the particular case of the United States, as, indeed, would happen in our own country, the full capacity of the pig-iron-making plants is always subject to a reduction of at least 10 per cent, for plants undergoing repairs or reconstruction, and then there is always more or less uncertainty as to the available supply of iron ores, which are not unlimited in any country, not even in the United States. At the same time, it need hardly be added that the plants of the United States were never in such a generally high condition of efficiency as they are today. The ineffective and uneconomical plants have been rapidly and largely eliminated during recent years, so that none can now hope to maintain its ground unless it has some claims to be up to date, and least of all in the centers that have alone been deemed entitled to consideration in this report.

Mr. Parkes, summarizing his observations, writes:

It will be seen, then, from this view of the conditions which prevail in America, that in some respects they have greater facilities and advantages than we have, among which are the advantages of improved machinery and methods of working; labor-saving appliances, which are developed to an extraordinary extent; greater facilities for the conveyance of traffic, both by land and water; improvements in engines and trucks, the development of waterways, lower railway rates and greater elasticity in their application to suit the exigencies of the trade, greater freedom of contract between masters and men, an educational system which is much more complete and thorough than our own, added to all of which there is an amount of native energy and a determination to get on and to make the best of their opportunities, which is apparent in all classes, combined with a system (which is increasing in America) by which men are paid by results. These are some of the causes which place America far ahead of the other steel-producing centers of the world, and conveying lessons to us in this country which I earnestly hope that neither our employers nor workmen will be slow to take advantage of, and which must be embraced if we are to maintain that position among the chief mercantile nations of the world that we have so long enjoyed.

Features of this summary are referred to by Mr. James in these words:

If English workmen applied themselves to get the best possible results out of the machinery and plant in their hands they would have less to fear from the competition of the United States or any other country. And if employers were able to secure fair reductions when introducing new methods the extent of renewals and the scrapping of obsolete machinery would increase rapidly.

So, too, Mr. Sahlin has a few words to say about man efficiency as follows:

Much of this promptness of action is no doubt due to the fact that principals are in close touch with the day-to-day requirements, and no delays arise in obtaining the sanction and approval required for the outlay involved. The inventive powers of responsible heads are stimulated to the utmost by this policy, and their advancement depends upon the success with which their ideas and suggestions are carried out. Some huge blunders are made now and again, and their results would probably have discouraged many weaker men, but in such cases a fresh start is made in America, and by avoiding previous errors better success is achieved afterwards.

Mr. Sahlin contributes to the discussion of competition the following suggestive sentences:

It is an axiom that no nation can remain or become a world power without the aid of an adequate iron industry. Great Britain cannot, and I am sure will not, see its iron industry permanently lose ground. If, therefore, which I do not believe, it should come to pass that protected America to such an extent makes free-trade Britain the market for such a surplus of iron and steel products as cannot elsewhere be disposed of, that the home industry of the latter country seriously and permanently suffers thereby, it must be remembered that nothing but the will and dictum of the British people keeps the door open for such imports, and that it is practicable, if not to close the door, at least to place such a barrier across it as to give those inside a chance to live.

It is hoped that these few extracts may give an idea of the position taken

by our English visitors—positions backed up by a mass of most valuable facts and figures based upon skilled inspection and investigation of thirty-odd different works in and around the principal iron and steel engineering centers, including Pittsburg, Philadelphia, McKeesport, Cleveland, Youngstown, Coatesville, Birmingham, Steelton and elsewhere, and presenting the broadest survey of the American iron and steel industries now available.

In a letter to the Manufacturers' Record the Austin Manufacturing Co., Manhattan Building, Chicago, Ill., manufacturer of crushing machinery, road-building equipment, etc., states:

We are developing a large business in the South, much of which we are glad to contribute to the advertisement you carry in your journal.

The Southern Farm Magazine.

Bearing directly and favorably upon the rapidly enlarging immigration movement toward the South is the publication in the January issue of the Southern Farm Magazine of Baltimore of letters from a number of representative farmers in Pennsylvania, Ohio, Indiana, Illinois, Wisconsin, Michigan, Iowa and Nebraska, giving their impressions of the South, based upon their observations as delegates to the National Farmers' Congress at Macon, Ga. These letters are written with extreme frankness and under the inspiration of perfect friendliness for the South and its people, with the memories of Southern hospitality and Southern soil and climate. They are valuable as expressions in behalf of the South of opinions based upon experiences in States where American farming has been carried on under favorable circumstances and according to the most approved methods. Not one of the letters is without its suggestion, but it is significant and worthy of serious consideration on the part of Southern farmers that, while recognizing the many great natural advantages of the South, many of the letters criticize in kindly tone the neglect of these opportunities, and nearly all of them comment upon the comparative scarcity of live-stock and upon the advantages from many standpoints in giving more attention to grazing. This suggestion is one of many pointing to the profit for the South in greater diversification in agricultural pursuits.

Southerners themselves are giving greater attention to live-stock, and in this issue of the Magazine that subject as related to Virginia is discussed by Paul Scherer and as related to Florida by J. W. White, both of these gentlemen being directly interested in calling attention of the North and West to the agricultural opportunities of the South. Editorially are discussed the delights of the South in winter, the work being done under the auspices of the national Agricultural Department with special reference to the South, rural free delivery and co-operation among farmers. The other departments of the Magazine are full of interesting and timely matter, Peter Pechin in his monthly review discussing the coal strike from a humorous standpoint and seriously the dangers to the common schools and the condition of negroes after forty years of freedom.

The Southern Farm Magazine is published monthly by the Manufacturers' Record Publishing Co., Baltimore, Md. Its regular price is \$1 a year, but for a limited period new subscribers are offered a rate of twenty-five cents a year.

The survey for the new inland waterway between Norfolk and Beaufort, N. C., under the direction of Major Quinn of

the United States engineering corps, is rapidly nearing completion, and the report upon it will be made in a few weeks to the War Department at Washington.

GROWTH OF NORTH AUGUSTA.

Improvements in Flourishing South Carolina Community.

[Special Cor. Manufacturers' Record.]

North Augusta, S. C., December 22.

Since the completion of the electric road from this point to Aiken the anticipations of the people who projected this enterprise have been more than fulfilled. About a year ago the North Augusta Electric & Improvement Co., of which Mr. James U. Jackson of Augusta is president; Mr. R. Lancaster Williams of Richmond is vice-president, and Mr. A. H. Rutherford of Baltimore is treasurer, was organized for the purpose of building an electric line between North Augusta and Aiken. In connection with this enterprise the company purchased about 5000 acres of land at North Augusta, where a town had been gradually developing for several years. This property is immediately across the river from Augusta, Ga., and is connected with that thriving city by an \$80,000 bridge. It is admirably located for general business and industrial interests, and is especially attractive as a residence point for people doing business in Augusta, since it is on high rolling land, furnishing the best building sites in this vicinity. The company built, as has previously been stated in the Manufacturers' Record, one of the finest resort hotels in the South, having accommodations for about 500 guests. This has all modern improvements, has been leased to one of the foremost winter hotel managers of the country, and there are indications of its becoming one of the most noted winter resorts of the South. The electric line gives quick connection with Aiken, and the success of this road since it was opened up a few months ago has been so great that it seems destined to largely stimulate the building of inter-urban lines throughout the South. There is considerable activity at present in building dwellings. Some of those recently constructed and others to be built will rank among the most attractive homes of the South. The town has up-to-date water-works and sewerage system, ample for a population of 5000 people. A fine schoolhouse has been constructed, and has now about 150 scholars in attendance. The directors of the company have built an attractive clubhouse with all necessary accompaniments as a winter home for their families, and a golf course has been laid out under an expert. While particular attention is being given to the advancement of North Augusta as a first-class residence place for the people of Augusta, as well as for those seeking a winter home in an almost perfect climate, the company has such a great stretch of territory that active efforts will be made for the location of factories, and just now a movement is on foot to create a new county, with North Augusta as the county-seat.

I. S. FIELD.

Mining Engineer and Geologist.

A mining engineer of the highest professional standing, now managing a large copper property in Mexico, desires to return to the United States, and is open to an engagement in any part of this country, but preferably in the South. Has had wide experience in expert investigations and management of large properties, and has given special attention to improved methods in smelting, coke-making, etc. For information address E, care editor Manufacturers' Record, to whom he refers.

MAYORS OF SOUTHERN CITIES TELL OF PROGRESS AND PROSPERITY.

Financial, industrial and commercial health of its cities is one of the surest indications of the prosperity of the South during the past year. The readiness with which municipal authorities present the telling facts about their respective communities is significant of the spirit of progress animating all circles, and it is the certain promise of nothing being left undone in the future to insure a steady advancement. These indications and this readiness are manifested in the quick response to a letter from the Manufacturers' Record to Southern mayors offering its columns for a brief review of the development during the year in the several localities. The result is a mass of letters filling six pages of this week's issue, describing conditions of towns and cities in the wide territory stretching from the Potomac to the Rio Grande, and setting forth the facts upon which healthy expansion is to be made.

Through these letters certain broad tendencies are apparent. These include municipal improvement, industrial and commercial growth and private enterprise in building operations. A number of years ago Memphis gave a signal illustration of the practical value to a community of attention to its hygiene. The lesson has not been lost on the South, and New Orleans, with its dominant position in cotton, sugar and rice in the markets of the world, with its additions to manufacturing industries under the spur of exemption of new ones from taxation for a certain period, and with its rising importance as a financier, is adding to its mileage of paved streets, is erecting numerous modern buildings and is now constructing an extensive and modern system of sewerage and drainage, which, for completeness and as an engineering proposition, is probably unsurpassed in the world. Shreveport, in the same State, has also added to its physical well-being by street paving and the construction of sewers and water mains without trenching upon its financial strength, while Jackson, Miss., is feeling the good effects in many ways of the installation of a drainage system, and a large force of labor has employment upon sewer construction and street paving at Nashville, under an authorized expenditure of \$600,000.

No State in the South, probably, is revealing greater activity than Georgia in the improvement of its cities by water-works, sewerage systems, electric lights and trolley lines, the many new buildings at Atlanta, including some structures from twelve to fifteen stories high, a new hotel and handsome residences being notable in this respect, and at Macon the erection of new buildings and the improvement of old ones being sharply reflected in the fact that brickmakers and other contractors are behind in their orders. In Florida, Jacksonville has made a wonderful recovery from its devastating fire of the spring of 1901, paralleling the courage and energy of Galveston after its disaster, and the 2400 buildings burned have been replaced by 2644 of modern design, most of them built during the past twelve months, this rebuilding being accompanied by the installation of improved electric-lighting and traction facilities and a general improvement of the streets. New woodworking plants of different kinds have begun operations there, while the wholesale business of the city has been enlarged.

Newport News, Va., is extending its sewerage system and its asphalt and macadam pavements, while Danville, in the same State, has not only broken records in its tobacco business, but also in its building operations, while the completion of a dam for the development of the water-power in the Dan river will increase the impetus in that direction. Preparations for the development to a greater extent of the already excellent water-power at Columbus, Ga., are being made, while an increase during the year of \$1,500,000 in the taxable values in its county represent largely investments in city residences, business blocks and industrial plants. The investment of at least \$2,000,000 at Fort Worth, Texas, by two great meat-packing concerns working in harmony has given a spur to the industrial life of that city, enabling it to share in the general good times shown at such far-removed points as Hopkinsville, Ky., with the increasing capacities of its flouring mills and tobacco factories; at Montgomery, Ala., with its manufacturing enterprises strengthening their business in a territory extending from South Carolina to Texas; at Suffolk, Va., a nest of industries giving solid and substantial progress; at Reidsville, N. C., where wealth is distributed upon a notably comprehensive basis through its cotton mills, flouring mills, tobacco and fertilizer factories and woodworking establishments; at Nashville, Tenn., where the industries are not able to fill orders in spite of working on double time, and at Bristol, Tenn.-Va., where two mayors unite in congratulations upon the improvement of railroad terminal facilities and in negotiations for the establishment of new manufacturing enterprises.

Textile plants in the Piedmont section, especially in the upper portion of South Carolina, mark the change toward higher grades of manufacture in the large bleachery being built at Greenville, in the box plant and dye works at Union, and in an increase of the population at Abbeville by more than 100 per cent. during the past decade as a result of the building of cotton mills, flour mills and other industries. Among these mills, as is the case with the twelve factories at Concord, N. C., additions are being made out of surplus earnings, a policy quite generally pursued in the South, with a stronger manifestation in no other place than Tampa, Fla., where an increase during the past five years of 100 per cent. of the capital invested in industries, principally cigar factories, bringing annual cash returns of about \$12,000,000, has been literally money made on the spot.

Augusta, Ga., in the center of an expanding fruit-growing and truck-raising area; Wilmington, N. C., where, under the auspices of a live chamber of commerce, is being made a crusade among the farmers for the encouragement of tobacco culture, are among the cities whose merchants are feeling the effects of agricultural prosperity, while Staunton, Va., in the midst of a rich agricultural country, and New Berne, N. C., the gathering-point of the results of farming activities, are striving to add manufacturing on a larger scale to agriculture.

The coal fields on the Arkansas-Indian Territory line are of especial importance to Little Rock and Fort Smith, which have active organizations of business men seeking opportunities for the material development of their cities, and now comes Camden, in the same State, pointing to its ready access to coal fields as an incentive to settlers with money to invest in manufactures. Johnson City, Tenn., with

three railroads, one of them to traverse the richest bituminous coal fields, perhaps, in the United States, and when completed to be a trunk line connecting the West and the seaboard, has all its industries running on full time, and its contiguity to coal is something like the advantage of Clarksburg, W. Va., with four railroad lines situated in the wonderful coal field and having plugged natural-gas wells awaiting a market at the rate of five cents a thousand cubic feet. Oil has brought its millions to Beaumont, Texas, while Lexington, Ky., has been stimulated by the development of the oil fields in Eastern Kentucky, many of the wells being owned in that city. Lexington, also, is sharing in the development of a system of interurban electric lines like that connecting Richmond and Petersburg, Va.; that planned to connect Chestnut Hill and Spencer through Salisbury, N. C., a point of distribution of power from the narrows of the Yadkin river to eight different cities; that bringing mill towns of South Carolina into close touch, and that to connect Baltimore, Md., with the capital of the country.

It is no wonder that the mayors of many cities send such messages as "never before was a greater proportion of the population employed;" "no mechanic, blacksmith, machinist, joiner, shipwright, boilermaker or building constructor need be out of work here," and "labor is actively employed, there are no tramps, and this is no place for idleness." The encouraging messages of these mayors are combined in the following letters:

At a Favorable Point for Commerce.

[Special to the Manufacturers' Record.]

Mobile, Ala., December 20.

Mobile, the largest city and only seaport in Alabama, is the nearest tidewater port to the vast coal and iron fields of the State; in fact, to the entire Middle West. Situated at the mouth of 2200 miles of navigable rivers, penetrating a country rich in coal, iron and hardwoods, with numerous steamship lines and railroads, salubrious climate, cheap labor and fuel, and an abundance of purest water, it is a most desirable point for the location of manufacturing enterprises, especially those of cotton, iron, wood and clay products. Low tax rates and superior banking facilities prevail.

During the current year over \$1,000,000 have been expended in the erection of new buildings, including modern office structures, banking institutions and manufacturing plants. The street-car system is being rapidly improved and extended. Railroads are being extended and new lines are in contemplation. Various steamship lines maintain regular sailings between Mobile, European, South and Central American and West Indian ports, and during the present year the Mallory Line has instituted a regular freight and passenger service between this port and New York direct.

During November of this year the population of the city was increased over 1000 by the establishment of manufacturing plants.

Mobile owns and operates its own water-works; has recently installed a complete sewerage system, and is now engaged in paving in the most modern and approved manner the entire central portion of the city.

With the completion of the municipal improvements now under way, with its natural and artificial advantages, Mobile bids fair to enter upon an era of growth and prosperity seldom seen even in this progressive land. **WALTER F. WALSH,**
Mayor of Mobile.

Growing Industries at Montgomery.

[Special to the Manufacturers' Record.]

Montgomery, Ala., December 12.

While the shortage in cotton crop is having an effect on the season's business and causing some complaint among our merchants, the general condition is good. Our industrial progress for the past few years has been excellent. My information from managers of all industrial enterprises is that there is a largely increased business.

While Montgomery has never made any great blow, it is a fact that all of our manufacturing enterprises are successful and growing every day, and that their territory extends from South Carolina to the

Rio Grande. I know of no manufacturing industry in our midst that is not prospering.

E. B. JOSEPH,

Mayor of Montgomery.

Property Values Advanced 50 Per Cent.

[Special to the Manufacturers' Record.]

Tuscaloosa, Ala., December 18.

Tuscaloosa, Ala., is situated near the center of the State, and fifty-six miles west of Birmingham. It has a population at this date of near 8000 people, including the suburbs. The general improvement in business and industrial progress has been very marked during the last two years. Property has enhanced in value over 50 per cent. during that time. Ten new store houses have been built, and over 100 residences and tenement-houses. All of them are rented at fair prices, and many more are needed.

The completion of the locks and dams in the Warrior river both above and below the city has attracted the attention of iron manufacturers and furnace men to the great advantages of this location on account of cheap water transportation to the Gulf of Mexico all the year around. One large furnace is now in course of construction. It is being built by the Central Iron & Coal Co., and will be one of the largest and best situated as to transportation facilities and cheap coal, lime rock and iron ore in this entire district. In connection with this immense plant is a by-product coke plant owned by a rich syndicate of Syracuse, N. Y. These two companies are expending \$15,000 to \$20,000 per month in their payrolls and other expenses, which is nearly all spent in Tuscaloosa, and has been the means of stimulating all lines of business. Another furnace will be built by the same company as soon as the one now under construction is finished, and a pipe foundry will be put in and will use the entire product of both furnaces.

Tuscaloosa has many other industrial plants recently established, all doing handsomely, and there is room for many more. The city is nearing that stage where it will not be dependent alone upon the agricultural surroundings for business. Business houses are all occupied, and there has not been a business failure in the place for several years. Rents are moderate, and taxes are cheap. Health is good, and churches and schools are first-class. The medical board is one of the best in the State. This is a splendid location for a cotton factory. Water is excellent, being filtered at the place where it is pumped from the river. The filter has just been completed at a large cost, and is the latest and best that could be obtained.

WM. G. COCHRANE,

Mayor of Tuscaloosa.

In Touch With Arkansas Coal Fields.[Special to the Manufacturers' Record.]
Camden, Ark., December 16.

Camden, the county site of Ouachita county, Arkansas, situated at the head of navigation on the Ouachita river, is the natural mercantile and industrial center of a section admirably adapted to the production of a large range of agricultural products and fruits, which attain here a high degree of perfection. The county contains 408,400 acres of lands, assessed at \$3,400,000, and in addition to its products for home consumption, its last cotton crop was 37,570 bales. There is near 300,000 acres in virgin forest, principally yellow pine, and the lumber interest adjacent is larger than any equal area in the South.

Contiguous to Camden is a coal field reached by both river and rail, which, by the authorized report of the geological department, is practically inexhaustible, valuable as a fuel and unequalled by any known coal in the range and uses of its by-products. This coal, hitherto unknown and undeveloped, is now attracting attention, and with the river continuously navigable by a system of improvement now in process of construction by the general government, an increase in all manufacturing interests will add largely to population and business enterprises.

The population of Camden is 3500. Its substantial business houses, handsome residences, fine churches and high school attest its culture and prosperity; its electric-light plant, water-works system and up-to-date hotels its modern improvements; its two trunk railroads intersecting each other and a navigable river its trade facilities; its cotton compress handles locally 25,000 bales; a large cottonseed-oil mill is just completed; it has a wagon and hardwood factory, offers unequalled inducements to the establishment of a cotton factory, and its banks transact easily its large and growing business.

No place within my knowledge offers better inducements to thrift, energy and enterprise.

A. L. MORGAN,
Mayor of Camden.**Natural Gateway to Indian Territory.**[Special to the Manufacturers' Record.]
Fort Smith, Ark., December 18.

At your request I enclose you a brief sketch of our prosperous little city.

Fort Smith, Ark., has 20,000 population, no city debt and \$500,000 in cash in its school fund. Its geographical position on the east line of the Indian Territory and west line of Arkansas makes it the central figure in the circumference described by New Orleans, Memphis, St. Louis, Kansas City, Wichita and Dallas. The Arkansas river, bridged here by the Missouri Pacific, is navigable for light steamers in the spring, and is a factor in giving us a low freight rate.

Fort Smith is the center of the Ozark fruit belt. This fall the output of apples was 200,000 barrels for four western counties. During this year the shipments from this section of potatoes, peaches berries and garden truck exceeded 2000 carloads. This is exclusive of cotton, corn and wheat, which are raised in large quantities. The wholesale houses and manufacturing concerns here travel 165 men in Texas, Oklahoma, Indian Territory, Missouri and Kansas, and this year have sold over \$20,000,000 worth of merchandise.

Our county produces the only smokeless coal in the United States, and is fast gaining a national reputation; our daily output now is about 30,000 tons; steam coal f. o. b. Fort Smith \$1 per ton.

Our future was never more encouraging, as we are the natural gateway to the beautiful Indian Territory, in which the lands are now being allotted to its citi-

zens, the balance to be sold, which will draw thousands of homeseekers and investors to this section of the country.

TOM BEN GARRETT,
Mayor of Fort Smith.**Jacksonville Undeterred by Disaster**[Special to the Manufacturers' Record.]
Jacksonville, Fla., December 15.

Responding as briefly as possible to your valued enquiry of the 10th inst. regarding the industrial progress and outlook of this city, I would say we have nothing but the most encouraging report to make. During the past eighteen months manufacturing enterprises have become established here in very many lines, particularly to be noted lumber, planing and finishing, sash, doors and blinds, spoke and hub, ice, cottonseed oil, fertilizers and cigars. Other plants have been enlarged; for instance, marine ways, shipbuilding, cabinet works and the like, and a brewery is assured. Many new lines of business are represented and engaged in, especially with reference to all kinds of building material and furnishings. The number of wholesale houses has doubled within that time, and the volume of wholesale business handled now is vastly larger than ever before in our history. The naval-stores business alone has become a very large and important factor, and Jacksonville promises to become the distributing and market-making point for spirits and rosin in this section of the country. Our wholesale dry goods and wholesale grocery, hay and grain houses have not only increased in number, but each has grown in trade at a tremendous rate. Our retail business was never as good, and this is saying all we could wish.

The custom-house records show that in November there were shipped from this port 12,250,202 feet of pine, of which 439,037 feet went to foreign ports, as against 9,725,500 feet November, 1901. We also shipped 35,037 crossties and 1,278,000 shingles, 19,196 barrels naval stores, 1140 bales cotton, 10,000 packages fruit, 3460 boxes oranges, 10,825 sacks kaolin, 53,540 miscellaneous packages, saying nothing of what has gone by rail. Our shipment of lumber in October was 20 per cent. more than in November, but generally there is a gradual increase.

Our transportation facilities have increased. Within the past few months the great Southern and the Georgia Southern & Florida have come in. Our river front is being bulkheaded and dotted with warehouses reached both by rail and water. The last Congress gave us about \$1,500,000 with which to obtain twenty-four feet of water from our docks across the bar to the open Atlantic. This means thirty feet eventually. Work is soon to begin.

You will recall the great conflagration of May 3, 1901, which consumed some 2400 buildings in the heart of the city. Since that terrible day 2421 frame and 223 brick and stone buildings have been constructed, a total of 2644 buildings, a majority not less than a year old. Some of them are as handsome as any city should boast, and all of them modern and substantial. Our churches are magnificent. Our public buildings, courthouse, city hall and public school would do credit to the most prosperous and wealthy community. And still the building goes on at the rate of ten to twenty permits every week. And the city is growing in every direction except as the St. John's river is its southern barrier.

Our population has increased at least 7500 within twelve months. There are 25 per cent. more children in our public schools than ever before. Our electric-light plant, owned (together with our water-works) and operated by the city, has been greatly improved and enlarged. The electric car lines have been extended

and improved, and give a splendid service. The telephone companies are prospering. The Clyde Line is adding another ship in response to our increased freight necessities.

We are paving streets, constructing roads, making parks and drives, and our people are full of public spirit and enterprise, good cheer and good-will.

The health of the city is most gratifying; in fact, our physicians are the only people who have any idle moments.

East coast development continues, and the whole State is prosperous. You can determine the outlook.

D. U. FLETCHER,
Mayor of Jacksonville.**Tampa's Self-Made Increase in Capital.**[Special to the Manufacturers' Record.]
Tampa, Fla., December 12.

The present conditions as to general trade and industry have never been equaled in the history of the city. This is especially true in all industrial lines. The manufacture of clear Havana cigars is the leading feature. It is now employing 7000 people in various capacities, and the output for the current year is over 150,000,000 cigars, with cash returns of about \$12,000,000. This is an increase of 15 per cent. over any previous year.

Compiled returns from the Board of Trade—necessarily incomplete for the month of December—show that at least the same proportion of increase holds good in population and in every branch of business. It is much exceeded in the advance in the price of the most desirable real estate. Out of a population of 30,000 in the city and contiguous suburbs, there is not a man or boy idle except from choice.

The prospect is for a permanent continuance of these conditions. The city has had no boom. There has been little influx of capital. The growth of 100 per cent. in the past five years has been literally self-made, and it seems that this will be the rule for the future.

Our commerce is growing equally as rapidly as our industrial interests. The extension of existing railroads and the construction of a projected one assure a considerable expansion of territory subject to our wholesale and retail trade, which is made doubly certain by economic changes in the management of our leading transportation lines.

Summing up the situation, the circumstances of Tampa leave nothing to be desired either as to present conditions or future prospects.

JAMES MCKAY,
Mayor of Tampa.**Atlanta Prospering as Never Before.**[Special to the Manufacturers' Record.]
Atlanta, Ga., December 12.

I am glad to say that Atlanta is prospering as never before in the history of the city. This is evidenced not only by observation in every direction, but from the reports of every department of the city.

The property values of the city have increased, and are still increasing beyond any former period. Our clearing-house reports and banks all show a really amazing increase in the commercial and financial affairs of the city.

The application and admission to the public schools, the really surprising increase in the postoffice receipts, and the number of new buildings, among them skyscrapers of from twelve to fifteen stories, new hotels, all of most expensive character and equipment, numbering 2000 new houses, all tell of an increase in population perhaps exceeding any city of like size in the country.

Capital comes in abundantly to be invested in various enterprises.

The best evidence of financial standing is that it is one of the ten cities nominated by the Treasury Department whose bonds

can be substituted in place of government bonds as security for issue of national banks.

In every public way as affecting the health and comfort, as well as promotive of the best interest of the city, its city government and departments throughout are always alert; so that it can be claimed that Atlanta is in the lead.

LIVINGSTON MIMS,
Mayor of Atlanta.**Substantial Reasons for Hopefulness**[Special to the Manufacturers' Record.]
Augusta, Ga., December 12.

The letter I wrote you as president of the Georgia Railroad Bank the other day will no doubt give you the information that you are seeking.

JACOB PHINIZY,
Mayor of Augusta.

[In the letter to which Mayor Phinizy refers, and which was published in last week's issue of the Manufacturers' Record, he pointed to the great demand for steel from abroad and the drafts upon the facilities of the railways as evidences of prosperity, to the comparative ease of money at the South and to the fairly prospering conditions of merchants of Augusta and the farmers of the surrounding country. He said that the demand for raw cotton growing annually necessitates an annual increase in production, and he was inclined to the opinion that the general trade in cotton goods will improve.]

Happy, Industrious and Contented People.[Special to the Manufacturers' Record.]
Augusta, Ga., December 11.

Notwithstanding the fact that the development of the South during the past decade has been wonderful, so much so that the story in some respects reads almost like a romance, yet one on the scene and an eye-witness to the great and progressive changes that are now taking place in the agricultural and industrial field in the South, who observes the yet wonderful undeveloped opportunities, is almost constrained to exclaim that the work of Southern development has only fairly commenced.

The year now drawing to a close has been one of great prosperity with us. Every section and interest seems to have been greatly blessed. Especially is this true of the farms, where a great deal of stuff has been made for home consumption which formerly came from elsewhere. An important factor in the South now is the production of truck and fruit, and from the sale of which much additional revenue has been brought here. Stimulated by the handsome profit in this line, the acreage for the coming year will be increased to a considerable extent.

What is true of the farms is also true of the small towns. They give every evidence of prosperity by keeping fully abreast the times. Nearly all of them are putting in water-works, sewerage system, trolley lines and electric-light plants, and making other necessary improvements.

In the face of the above favorable conditions, and coupled with the fact that we have a happy, industrious and contented people, the outlook to me for the coming year is one of great promise.

GEORGE NEES,
Secretary Chamber of Commerce.**Property Values Increased \$1,500,000 in One Year.**[Special to the Manufacturers' Record.]
Columbus, Ga., December 12.

For the past four years the commercial and industrial progress of Columbus has been so marked as to attract widespread attention and evoke favorable comment in all the centers of finance and trade, which quickly observe any conspicuous activity in the commercial or industrial world.

The voluntary tax returns in this county for 1902 exceeded those of 1901 by

\$1,500,000, practically all of which is represented by recent investments in such substantial enterprises as manufacturing plants, business blocks and city dwellings.

The outlook for the immediate future is exceedingly bright. Engineers are now in the field preparing plans for additional development of our already immense water-power. Architects are busy on designs for new warehouses, stores and dwellings. Financial institutions, mercantile establishments and manufacturing plants have almost without exception had a prosperous year, and in many instances are preparing to extend their fields of operation.

There has been no perceptible overtrading and no unusual amount of speculation. Our bank deposits are ample, and the farming territory tributary to Columbus is prosperous.

There is every reason to feel that the advances already accomplished in the past few years will be followed by still greater achievements in the immediate future.

L. H. CHAPPELL,
Mayor of Columbus.

Building Fervor at Macon Unabated.

[Special to the Manufacturers' Record.]

Macon, Ga., December 12.

With the shifting of the scenes, looking still at the past year, we see a year unparalleled in the history of Macon for increased business in every branch of trade and for extent of improvements in realty. More building and improving of old buildings has been done in 1902 than in any other year since its incorporation. Looking forward at the new year, there is much to be seen. Indications are in evidence that the building fever will continue, and better trade is the natural sequence. Merchants are in the best of humor and spirits, the manufacturers find sale for all their products, the brickmakers—and there are several—are behind with orders, and the general outlook is all that can be desired.

BRIDGES SMITH,
Mayor of Macon.

Industries Added and Planned.

[Special to the Manufacturers' Record.]

Rome, Ga., December 10.

Though this section has just passed through the longest and most disastrous drought in its history, and though not more than 40 per cent. of an average crop was harvested, yet business conditions are excellent, and collections are remarkably good under the circumstances.

The recent statement of all the city banks shows an increase in deposits and earnings, and wholesale men report trade is holding up better than was expected.

In an industrial way matters are very satisfactory. The Massachusetts Mills in Georgia, near Rome, have about completed another mammoth mill at an investment of nearly \$1,000,000. The plant will operate 103,000 spindles and employ 2300 people. The Anchor Duck Mills, Morrison & Trammell Brick Co., Rome Furniture & Lumber Co., O'Neil Manufacturing Co., Rome Manufacturing Co., Southern Co-operative Foundry Co. and a number of other plants here had added largely to their capacities. A number of new enterprises have been put in operation during the past year, the most important being the Hanks Foundry Co. (co-operative), manufacturing stoves and hollowware.

Among the industries planned for the coming year are hosiery mills, batting, comfort and quilt mills, stove and hollowware foundry, shoe factory and cottonseed-oil mill.

The real-estate situation is better than for many years past. There is not a dwelling of medium or better class to be had in the city. Small tenant houses are in great demand, and rents both in busi-

ness and resident property show a healthy advance.

The commercial orchard interest about Rome has grown enormously. The perfection to which the peach attains in this favored section and the large profit made in shipping have caused the investment of many thousand dollars in orchards, and it is estimated that there will be 4,000,000 peach trees in Rome territory next year.

Several large iron mines have recently begun operation, and all are behind with orders.

In conclusion, I would say that this city and section seems to have before it a period of unusual prosperity.

J. D. HANKS,
Mayor of Rome.

Covington Looking to Enlarged Boundaries.

[Special to the Manufacturers' Record.]

Covington, Ky., December 15.

The geographical and topographical situation of Covington is very desirable for both a residential and manufacturing city.

Located upon the Ohio river, immediately opposite Cincinnati, its citizens have all the advantages and conveniences which an actual residence in the larger place would afford, and at the same time enjoy the comforts of a suburban residence.

The population is cosmopolitan in character, natives, Germans and Irish predominating. The churches are numerous, embracing all denominations, and the church buildings in size and beauty of architecture compare well with any city.

No better school facilities and no better managed system exist anywhere. The schools are well patronized, our people fully recognizing the importance of education. Liberal appropriations are made annually by the city for their maintenance, and they are free to every child in the city.

Desirable residences and residential property are obtainable at reasonable figures either by purchase or rent. The western and southwestern portion of the city furnishes splendid sites for manufacturing plants, and the policy has been adopted of offering exemption from taxation as an inducement for manufacturers to locate here. Shipping facilities are very good, and are being extended and improved. The people are industrious and thrifty, most of them owning their own homes.

Covington owns its own water-works system, and we are proud of the fact that it is the best in the Ohio valley, without exception. The supply is from the Ohio river at a point five miles above the city, where are located three large reservoirs, the elevation furnishing sufficient pressure to give ample fire protection to the entire city.

The city maintains an active and efficient paid fire department.

The assessed value of property in the city is about \$23,000,000, and the population is about 48,000. A progressive system of modern street improvement is in operation, which is comprehensive enough in purpose to embrace all the streets, alleys and sidewalks in the city.

No city in the Ohio valley offers superior attractions to the permanent homeseeker or to the legitimate mercantile or manufacturing enterprise.

I believe the future of Covington to be very bright and promising. In the very near future I expect to see a general desire pervading all our suburbs—Ludlow, West Covington, Central Covington, Latonia, etc.—for annexation to Covington, so that a real community of interests may obtain.

"In union there is strength," and with

all the contiguous settlements on the west side of the Licking united under one municipal government, all working for the growth and glory of a larger and a better Covington, nothing would be too great or difficult for our people to undertake and to accomplish in the general march of progress.

Annexation is sure to come, and to come by and with the consent of all interested. It will come because it is in consonance with the spirit of the times and the very nature of things. That it will be mutually and generally advantageous will be an accepted and proved fact by the results obtained and the possibilities presented of greater things to follow.

The utilization of the waste lands at the western line of the city will also come at no distant period. The low lands bordering Willow Run will be filled from the adjacent hills, and factories of various kinds will locate there, bringing to our city an influx of mechanics, artisans and laborers, a material increase in population of a desirable sort, and giving our city a greater commercial importance at home and abroad by the extent and variety of our manufactures.

W. A. JOHNSON,
Mayor of Covington.

Increasing Capital and Capacity.

[Special to the Manufacturers' Record.]

Hopkinsville, Ky., December 12.

Our three flouring mills are turning out about 750 barrels per day; the Acme Mills & Elevator Co. has increased its capital to \$200,000, and the capacity will be increased to 1200 per day. A new tobacco factory commenced operation recently; capital, \$25,000. Forbes & Bro. are preparing to largely increase the capacity of their wagon factory. Our builders and contractors are busy.

Two planing mills and one door, blind and sash factory are busy. The First National Bank and the Planters' Bank & Trust Co. have both completed very handsome buildings during the year. The Tennessee Central Railroad now has a large force of men at work on the line between this city and Clarksville, Tenn., and trains will be running over the new road from this place to Nashville, Tenn., by July 1, 1903.

We are offering all possible inducements to manufacturing plants to locate here; a live and progressive Commercial Club is actively at work, and the business prospects look bright for next year.

JOUETT HENRY,
Mayor of Hopkinsville.

In the Heart of Bluegrass Kentucky.

[Special to the Manufacturers' Record.]

Lexington, Ky., December 15.

Business is brisk in all lines of trade. A steady increase in population has created a demand for business and residence houses. Over 200 such houses have been built during the present year, and still the demand is greater than the supply. A system of interurban electric lines is being constructed that will greatly increase the business of the city. The development of the coal-oil fields in Eastern Kentucky is stimulating great activity here in that line of business, a majority of the wells being owned in this city. Our schools and colleges were never more prosperous. There are over 1000 students attending the colleges. There is an active demand for farm lands for stock-breeding establishments. Among the recent investors are Haggin, Belmont, Brown, Harkness, Keene and Creighton, representing an aggregate capital of several millions.

H. T. DUNCAN,
Mayor of Lexington.

Much Tobacco Is Handled Here.

[Special to the Manufacturers' Record.]

Mayfield, Ky., December 13.

We have a town of about 5000 people, one woolen mill and pants factory com-

bined, two pants, clothing and skirt factories. These three factories work from 1000 to 1500 persons. We have two planing mills and a lumber-yard, two merchant flouring mills, one large tobacco-manufacturing plant working 150 or 200 hands, eighteen tobacco rehandling barns, which ship, prize and sell tobacco by the hoghead, and two tobacco warehouses in which tobacco is sold by the hoghead.

Our water-works take water from about 200 feet under the earth. We have a fine electric-light plant, and a great number of dry goods stores and groceries. A soap factory, a large pottery establishment and vinegar works are among our other establishments. We have an up-to-date town, with one railroad, the Illinois Central system, and two more railroads contemplated.

T. W. MCNEILLY,
City Clerk of Mayfield.

Prosperity That Is Permanent.

[Special to the Manufacturers' Record.]

Shelbyville, Ky., December 17.

The year 1902 has been the most prosperous this little city has ever known. There have been a great many valuable business houses erected, a large number of dwellings—as a rule a better class than heretofore. Real estate is much in demand. There is now in course of construction from Louisville to the city an electric line of railway, giving this little place most remarkable railway facilities in connection with three great trunk roads that now pass through it. In my judgment, this prosperity is not fictitious or temporary, but to a large degree permanent.

This is purely an agricultural district. Crops have been abundant, prices have been good and the farmers are in fine condition and confident of the future. We have abundance of capital, and the holders of it are not afraid to let it out for any legitimate business undertaking.

I have known this city intimately for thirty years, and I am confident the business outlook is better today than I ever saw it at any other time since I have known it.

L. C. WILLIS,
Mayor of Shelbyville.

Optimistic Citizenship of New Orleans.

[Special to the Manufacturers' Record.]

New Orleans, La., December 15.

New Orleans is the metropolis and principal market for almost 10,000,000 of prosperous people; occupies first place among the markets of the world in cotton, sugar and rice; shows an increase of 207 per cent. in the last twenty years in the amount of capital invested in factories; 73 per cent. of the total population, which I believe exceeds today 315,000, is white. The city is now constructing a system of sewerage and drainage unsurpassed by any city in Europe and America, is adding to her mileage of paved streets, erecting numerous modern buildings and going forward with rapid strides financially, industrially and commercially.

New Orleans has a complete system of public and private schools, and all of her numerous educational institutions are prosperous. She occupies second position among the United States ports; exempts many factories from taxation until 1910, and with appropriations already made, is assured thirty-five feet of water, giving easy access to the largest ships in the world.

The leading financial, industrial and educational associations of the United States have selected New Orleans as their place for holding conventions, and our visitors, who are more numerous now than ever before in the history of the city, seem to unanimously accord with the now famous tribute of Dr. E. A. Alderman of Tulane University, that "New Orleans is the sweetest-mannered city in the world."

Our churches, exchanges, clubs and associations of all characters are growing.

The citizenship of New Orleans is optimistic in the highest degree, and it is confidently believed by our home people that the next five years will see greater improvement in every way than has been accomplished during any twenty years of the past. PAUL CAPDEVIELLE, Mayor of New Orleans.

Physically and Financially Healthy.

[Special to the Manufacturers' Record.]
Shreveport, La., December 15.

The general business conditions are most excellent, both retail and wholesale. The banks are in a healthy condition, and the deposits show a great increase.

Shreveport's adaptability as a distributing point is well known throughout the South, and as a jobber there are few cities in the South that enjoy better prestige. The jobbing business, wholesale grocers alone, amounted to nearly \$14,000,000 last year. There are wholesale hardware establishments, queens and glass ware, druggists and manufacturing chemists, etc., located here, all doing a phenomenal business.

Shreveport is one of the greatest interior cotton markets in the South, being exceeded only by Houston and Memphis. Shreveport has eight railroads, and is located on the banks of the fertile Red river.

The financial condition of the city is most excellent, notwithstanding the heavy burden encountered during the past two years in paving streets, laying sewers and water mains, and making other needed improvements.

About eighteen months ago the citizens erected a \$100,000 cotton mill, which has never been put in operation. An excellent opportunity is open for a man of experience and capital in this line to take charge of the factory. I am confident arrangements can be made with the owners either to sell or lease to the right party. Shreveport is situated in the center of the great Red river cotton valley, and the product can be secured easily with which to operate the mill. Skilled labor would of necessity have to be furnished by the prospective operator; inferior labor can be secured here.

Shreveport has a population of over 25,000, and in less than five years it will in all probability double itself.

ANDREW QUERLES,
Mayor of Shreveport.

Canneries as a Basis of Commerce.

[Special to the Manufacturers' Record.]
Biloxi, Miss., December 15.

The commercial importance of Biloxi began with the establishment of a cannery for coving oysters and putting up shrimp by L. Lopez, Sr., W. K. M. Duke, F. W. Elmer, James Maycock and W. Gorenflo in 1881, with a capital of \$8000. Today in the canning of oysters Biloxi stands in the world second to only Baltimore, Md., and is the only place in the United States excepting New Orleans where shrimp are canned.

Last year the firm of Lopez & Duke alone shipped 525 carloads of canned oysters and shrimp. The E. C. Joullian Packing Co. the same year packed 150,000 cases of oysters and 25,000 cases of shrimp. The capacity of the Barataria Canning Co. and the Wm. Gorenflo Packing Co., the Biloxi Canning Co. and the E. C. Joullian Canning Co. are about the same. Biloxi also leads all other points along the coast in the shipping of raw oysters. About one-third of the population is engaged in the taking and canning of sea products. The Barataria Canning Co. is now constructing a plant for crushing oyster shells and shrimp hulls; the first is used for roofing, street paving, concrete and poultry food

and in the manufacture of artificial stone; the shrimp hulls are very valuable for fertilizers, bringing as much as \$21 on the market. The crusher has a capacity of 100 tons daily.

The governor has recently issued a proclamation authorizing the incorporation of the Biloxi, Waynesboro & Cohoba Valley Railroad Co., to operate a line of railway between Biloxi and a point on the Tombigbee river, connecting with the Mobile, Jackson & Kansas City Railroad.

A company has been organized and a franchise secured for building an electric street railway and power system in this city, the system to be completed by August, 1903. The United States government has purchased a site in Biloxi for a \$125,000 federal building, work to begin early next year. An appropriation has also been made by the government to make a survey to determine the cost of cutting a channel for ocean-going vessels from Biloxi to Ship Island. Biloxi has a natural harbor, and with a deep-water channel will surpass any harbor in the South.

The population is about 7000. The assessed valuation of real estate is about \$1,600,000. Biloxi is a summer and winter resort. J. W. SWETMAN, Mayor of Biloxi.

Enterprise and Public Spirit Paying.

[Special to the Manufacturers' Record.]
Meridian, Miss., December 14.

Meridian was never in better condition, absolutely and relatively, than today. The volume of business transacted here during the past year was greater than any previous year; more and better houses have been built and several additions have been made to our manufacturing equipment. Taxable values have been materially increased, while the growth in population has been so considerable that there is a constant clamor for desirable houses to live in. The city is growing, and the growth is both rapid and healthy.

Commercially speaking, the city's trade, both retail and jobbing, is constantly expanding to embrace new territory, both in West Alabama and East Mississippi. It is coming more and more to be the recognized trade center of a larger area, and this fact finds expression in larger and additional storerooms.

The cotton mills here have doubled their capacity, while several additions have been made during the year to the wood-working plants. The several oil mills and fertilizer factories are doing a large business, while every minor industry is flourishing. A new jail has just been completed at a cost of \$30,000, and the cornerstone of a high-school building to cost \$35,000 was laid a few days ago.

Economically, Meridian is today reaping the fruit of the sowing of enterprise and public spirit which have animated her people for the past twenty years. She is prosperous and prospering materially, socially and politically. E. E. SPRINGS, Mayor of Meridian.

Center of Wholesale Trade.

[Special to the Manufacturers' Record.]
Natchez, Miss., December 17.

Natchez today is the central distributing point between New Orleans and Memphis. To show this we will take in a general way the large amount of business done; without any exception, Natchez is the only city of its size that can boast of as many wholesale houses. To illustrate, we have ten wholesale grocery houses, which do an annual business of at least \$5,000,000; two large wholesale dry goods and shoe houses, which do at least \$1,000,000 per year; three wholesale hardware houses, besides wholesale drug, liquor, cigar and tobacco firms. All of these firms are large in their way, and reach out all over this section for trade; they go

down the river between Natchez and Bayou Sara, up the river to Vicksburg, east of Natchez 100 miles and west of Natchez to the Arkansas line. We have the Yazoo & Mississippi Valley Railroad of the Illinois system on the east, the New Orleans & Northwestern Railroad from the west, the Natchez, Red River & Texas Railroad from the west, the Texas & Pacific, which is now building on the west, and will be in active operation in eight months, and the probable building of the Natchez & Gulfport to the southeast and the Arkansas Central on the northwest. Local packet from Natchez to Vicksburg and local packet to Bayou Sara, carrying freight and passengers, are both owned and controlled by Natchez citizens.

The population tributary to Natchez over these transportation lines is 150,000.

The banking facilities are of the best. The published sworn statement of the three banks show deposits of \$2,200,000 and loans and discounts of \$1,600,000; clearances about \$50,000,000.

In addition, we have two large cotton mills, two cotton compresses, two cottonseed-oil mills, one ice factory, two electric-light plants, one gas plant, two large cotton gins, over four miles of electric road, a charity hospital (supported by the State, Adams county and city of Natchez), one sash, door and blind factory, more than 200 retail stores, and numerous other enterprises.

Our cotton receipts are about 90,000 bales per year, besides large truck farmers, and in addition to the above, Natchez is the county-seat and draws from the entire county all the business done.

In conclusion permit me to observe that there is no place on earth where good people can live and prosper more pleasantly and happily than in this city, which, like Jerusalem, the golden, is "beautiful for situation" and the joy and delight of its favored inhabitants.

W. G. BENBROOK,
Mayor of Natchez.

Steady, Healthy, Satisfactory Growth

[Special to the Manufacturers' Record.]
Charlotte, N. C., December 12.

Charlotte, the Queen City of the South, is having a steady, healthy and satisfactory growth, and her business and industrial outlook is most encouraging. The wholesale trade has been of large volume and entirely satisfactory. Retail merchants, on the other hand, report business retarded by the unseasonably warm weather which prevailed until quite recently, but the present favorable weather is making retail trade very brisk, so that in the end the volume of business promises to be up to the average.

Charlotte bids fair to maintain her prestige as a manufacturing center, as several new enterprises are under consideration, with the prospect that the new year will see them safely launched. At one time lack of coal threatened the shut-down of some of our factories, but happily this danger has been averted, and there is no longer any fear of a scarcity of steam coal.

One of Charlotte's needs, increased hotel facilities, is in a fair way to be supplied, as the outlook for the erection of one or more modern up-to-date hotels and remodeling one of the present ones, with considerable additions, seem to be assured, with the prospect that early spring will see work actively begun.

Our present fine electric street-car system is being still further extended and improved, giving territory not already covered the benefit of rapid and safe transportation. With her splendid railroad facilities, fine macadamized streets and roads, healthy location and delightful climate, Charlotte and Mecklenburg county

always stand ready to welcome newcomers and new enterprises. P. M. BROWN, Mayor of Charlotte.

Building Additions With Surplus Earnings.

[Special to the Manufacturers' Record.]
Concord, N. C., December 12.

The town of Concord is located in the Piedmont section of North Carolina, and has a population of 10,000 people. Its principal industry is the manufacturing of cotton goods. The twelve factories here are on a good business basis, paying good dividends and at the same time building additions out of the surplus. The new furniture factory is on a sound financial basis and doing a good business.

Our people are building much larger storerooms, and they are well filled with new goods and new merchants. The demand for storerooms and dwellings far exceeds the supply.

The merchants are in a very prosperous condition, have bought heavy, and report good sales. There have been no failures of any consequence here for several years. New firms are opening up, and are promised a good business.

The farmers throughout this section are in a better condition than they have been for six or eight years. They raised a good cotton crop, for which they received a good price. The corn crop was also very good. A good wheat crop has been sown. The farmer is in good shape, and has money to support him the coming year.

Altogether, the business outlook for our city and county is very promising indeed.

M. B. STICKLEY,
Mayor of Concord.

Farmers and Merchants Prosperous.

[Special to the Manufacturers' Record.]
Goldsboro, N. C., December 12.

Business in all lines is good here. The agricultural products of this section have sold for high prices, enabling the farmers as well as the merchants to be in a prosperous condition. There have been no failures. Debts are paid promptly.

The manufacturing enterprises of our city, numbering about twenty kinds, were never in better shape. All are running full time, and the demand for the manufactured articles is equal to the supply.

While provisions are exceedingly high and living costly, there seems to be no stringency in the monetary world.

Generally speaking, our people of every description are happy, prosperous and contented. The outlook for the future is bright and promising. Industrial, commercial and educational expansion and development in all lines characterize our community. GEORGE E. HOOD, Mayor of Goldsboro.

Agriculture Joined With Manufactures.

[Special to the Manufacturers' Record.]
New Berne, N. C., December 18.

The agricultural outlook is about as good as could be desired. The country tributary to New Berne has yielded bountiful crops that were marketed at profitable prices. Cotton and tobacco are the leading items, but the truck business has also been a source of profit, and the farmers begin a new year in better shape than they have in years. In the city proper the large lumber mills have been running full time all year, and as this industry employs more people than any other we have, there has been no complaint from either employer or employee. Our knitting factory has been fully occupied, and same can be said of our canning establishment and fertilizer factories. There is no more inviting field for the capitalist and manufacturer than our city affords. On account of water transportation we have a low rate of freight to the Northern, Eastern and Western markets, and labor is reasonable. Our city owns its electric-

light plant and water-works, and our streets are in good condition. Taxes are low, and, in fact, there is every inducement to offer any manufacturer who may want to better his surroundings.

FRANK T. PATTERSON,
Mayor of New Berne.

Wealth Well Distributed at Reidsville.

[Special to the Manufacturers' Record.]
Reidsville, N. C., December 16.

One of the most prosperous and substantial of the many manufacturing towns in North Carolina is Reidsville.

Located in the center of a section famed for raising the finest chewing tobacco in the world, very naturally Reidsville counts tobacco as its principal industry. Every house in the town has been built since the Civil War, and today it numbers about 5000 inhabitants, and ranks officially as tenth in North Carolina in value of manufactured product. The tobacco factories are all independent of the American Tobacco Co., and are not only thoroughly established and prosperous, but their business shows a handsome increase from year to year, having a ready sale for their well-known brands in every section of the Union. These, with a large cotton mill, a fertilizer factory, roller flouring mill, woodworking establishment and various smaller industries, are making an output conservatively estimated for this year at a valuation of \$3,000,000, which is a handsome increase over last year. The sale of loose leaf tobacco for this year will be not less than 8,000,000 pounds, as compared with about 7,000,000 pounds last year. Prices for tobacco having ruled high this season, and the manufacturers having had a successful year, Reidsville, instead of lagging, is forging on rapidly to the front. This steady, healthy growth each year and a much more general distribution of wealth among its citizens than is usual not only makes Reidsville a thoroughly substantial and successful town, but augurs well for its continued prosperity.

With paved streets, electric lights, an inexhaustible supply of chemically pure water, low rate of taxation, cheap labor, excellent school facilities and a delightful climate, Reidsville offers an ideal location for all kinds of new industries.

FRANCIS WOMACK,
President Chamber of Commerce.

Salisbury a Distributor of Power.

[Special to the Manufacturers' Record.]
Salisbury, N. C., December 12.

Salisbury has a population of about 8000. Spencer, a suburb two miles from the courthouse, and where are located the Southern Railway Co.'s shops, has a population of 3000. Chestnut Hill, a suburb about one mile from the courthouse, has a population of about 2000.

The money has been subscribed by local parties and work already commenced to connect Chestnut Hill on the west with Spencer on the east, and running through Salisbury with an electrical street railway. This road, it is expected, will be finished by the first of May next.

There are located here three cotton mills running about 45,000 spindles, and a new one in course of construction, which will run about 6000 spindles.

A furniture factory has recently been erected employing about 100 hands.

The granite quarries located near here are now being opened on a very large scale by the Whitney Reduction Co., which has recently opened its general offices at this point, and which is also developing 45,000 water horse-power at the Narrows of the Yadkin, with the idea of supplying power to Salisbury, China Grove, Concord, Charlotte, Lexington, Thomasville, High Point and Greensboro. The distributing point will be Salisbury.

The city within the last year has purchased the water-works and added largely to its capacity, making a most complete system for fire, business and household purposes. The water is of the purest.

The principal hotel has been recently enlarged and refitted. Several large and handsome business buildings have been erected within the last year.

The stock of the savings bank has recently changed hands, and a large additional capital added. A. H. BOYDEN,
Mayor of Salisbury.

Its New Era Dated from 1898.

[Special to the Manufacturers' Record.]
Wilmington, N. C., December 12.

It is a fact which cannot be denied, and which every business man in this city will testify to, that the general business and industrial progress and outlook here is better in every way than ever before. The Manufacturers' Record publishes every new enterprise in the South, and has given those recently established in and around Wilmington, but, of course, the mere mention of these can convey no just idea of the real advance industrially and commercially, or of the quickened spirit that prevails in business of every kind. I have been told by returning persons who lived or visited here prior to November 10, 1898 (from which we date our new era), that they hardly recognized the place as the same, so great has been the improvement in development and in the spirit of the people.

The bank deposits are growing rapidly, labor is fully employed, the volume of business steadily increases, and buildings are multiplying; railroad facilities and steamboat traffic are larger, and foreign shipments are greater. There is not and never has been any "boom," but there is a steady growth and a healthy one. The most recent enterprise in which our "five" Chamber of Commerce is interesting itself is a large tobacco warehouse, and a crusade among the farmers of adjoining counties in behalf of tobacco planting, which will be something new, except in a small way, in this region. The recent removal of the offices of the Plant system to headquarters here of the Atlantic Coast Line has added to the social and business life also. But I feel I am exceeding my allotted space.

A. M. WADDELL,
Mayor of Wilmington.

Population Increased by Industries.

[Special to the Manufacturers' Record.]
Abbeville, S. C., December 13.

Abbeville is located in the midst of the cotton-producing belt and of the cotton-manufacturing section of the South Atlantic States. It has a population of over 4000 souls, an increase of about 125 per cent. in the last decade, brought about principally by the introduction of industries of various kinds, as follows: A cotton mill costing \$750,000, a furniture factory costing about \$30,000, a roller flouring mill for \$10,000, a warehouse for \$8000, electric-light and power company, telephone and water-works systems throughout the city and a new hotel in construction estimated to cost \$30,000. There are also workshops of the Seaboard Air Line Railway, with an average monthly pay-roll of \$12,000; a cottonseed-oil mill costing over \$30,000, besides numerous smaller industries, all of which are being worked up to their full capacity. The bulk of the business of the city has more than doubled in the ten years, and the assessment of property has been raised from \$600,000 to \$1,300,000. Two banks, the National Bank of Abbeville and the Farmers' Bank, with a capital of \$70,000 each, are doing a profitable business. The cotton sales will not reach those of last year, but the sales of grain and other produce are greater. The out-

look for the business of the city and county we think is as favorable as it has been for some years back.

J. L. McMILLAN,
Mayor of Abbeville.

A Center of the Cotton Industry.

[Special to the Manufacturers' Record.]
Greenville, S. C., December 12.

I do not know of any place that has a brighter outlook than our city. We are having no failures in the mercantile business, and we are enjoying a healthy growth. Our principal industry is the manufacture of cotton. We have seven large mills in operation, and three under construction. There is also a large bleachery being built here. Next year the American Cigar Co. will start a large cigar factory here. We have an electric car line, electric lights, sewerage, and one of the finest water supplies in the United States. Our water comes from Paris mountain by gravity system. The elevation of our city is 1000 feet. Our population is 20,000.

C. C. JONES,
Mayor of Greenville.

In the Midst of Cotton-Factory Building.

[Special to the Manufacturers' Record.]
Greenwood, S. C., December 10.

The general business and manufacturing interests of this city and county are, in my opinion, more prosperous than ever before in the history of the city and county. The entire upper part of this State is being rapidly developed, and factories are going up in nearly every town. In this city one of the mills is now in course of doubling its capacity; at Ninety-Six, in this county, a large mill has recently been completed, and at Wares Shoals, also in this county, a large mill is in course of erection. The banks of the city are in an apparent healthy condition, and supply the demands of the people, so far as I am informed.

Real estate has steadily advanced in price, and meets a ready market. The agricultural interests of the county are not suffering. While the cotton crop, which is our principal crop, is said to be short, the farmers are receiving a fair price for their cotton, and on the whole are in a better condition than for many years before.

There have been no failures during the year, and with the exception, perhaps, of a very few, the merchants of the city are doing a good and profitable business.

I believe that the city and county—in fact, the whole country—is on the highway of prosperity, and if not impeded by an unwarranted financial panic will in a short time have reached that condition of financial and industrial health never before attained in this country.

J. B. PARK,
Mayor of Greenwood.

Industries Improve Equipment.

[Special to the Manufacturers' Record.]
Rock Hill, S. C., December 17.

Rock Hill is enjoying in every department of industrial endeavor her full share of the country's unprecedented prosperity. Not since the Civil War have the farmers of the surrounding country made such splendid crops with so little expense; never have her merchants made such good collections; never has a greater proportion of her labor been employed.

The city is thirty years old; the population then 273; 1880, 809; 1890, 2781; today, nearly 7000. Nearly \$1,000,000 is the capital of her five cotton mills; her buggy factory is the biggest in the South; electric lights and water-works, macadamized streets and roads leading into the country three miles, railroads in four directions, besides her natural advantages, ensures for Rock Hill a great future.

The National Union Bank, a government depository, has a capital of \$100,000.

Three building and loan associations have played an important part in the development of the city. The Catawba Power Co.'s plant on Catawba river, five miles north, will be completed by September, and will be able to furnish 7000 horsepower to the city at a low price.

Standing among the foothills of the Piedmont, 668 feet above sea-level, Rock Hill is surrounded by a farming country capable of growing the greatest diversity of crops. She has a modern graded school system, and here also is Winthrop Normal and Industrial College of South Carolina. Nine handsome churches tell of her interest in things religious.

During the past year a marked evidence of her prosperity has been the number of handsome residences built. The manufacturers have enlarged and improved their equipments. Here the professional man will find a growing field and the laborer a growing demand for his services. Pluck, push and enterprise characterize her people, and never in this young city's history have her people been dominated with a more splendid courage.

J. K. OWENS,
Secretary Commercial Club.

Money Moving in Solid Investments.

[Special to the Manufacturers' Record.]
Union, S. C., December 11.

The general business and industrial progress and outlook of Union was never brighter, nor was the actual business and progress ever more safe, sound or better.

Within the past ten years our county and city have stepped up in progress with wonderful strides; are more than holding what they have easily, and are at this writing reaching after more.

There is absolutely no speculation in moneys, stock or lands. What money there is here is kept moving in solid, safe investments. There have been no failures to speak of. We have built within our county and city within the past ten years Union Cotton Mills No. 1 and No. 2, with their 90,000 spindles and \$1,500,000 capital; the first and most complete knitting mill in the South, with its 6000 spindles; box plant and dye works, turning out 12,000 pairs first-class hosiery per day, and representing a \$350,000 investment; Lockhart Mills on Broad river, with its capital of \$750,000, has just been ordered doubled by the directors at their meeting this month, and it will be pushed to completion the coming spring and summer; then the Alpha Cotton Mills and the Jonesville Knitting Mills, nine miles north of our city and in our county. Then comes the great Buffalo Cotton Mills, with its branch switch, three miles west, representing about \$1,000,000, and which is considered the finest electric-power plant in the country, now almost finished and in operation; also a 40-ton ice plant in course of construction, a 20-ton cottonseed-oil mill also in course of construction with an up-to-date electric ginny. Then there is the great Monarch Mills (cotton), with its 40,000 spindles and \$750,000 capital, just outside the corporate limits, one-half mile east of the city, and the beautiful \$200,000 Aetna Cotton Mills, with its 15,000 spindles, between the Monarch and the city, besides great municipal improvements, such as electric lights and water-works, with the finest filtered water in America, and hotel, banks, stores, opera-houses and business blocks. Sewerage bonds have been voted. There are two brick works and innumerable smaller industries which cannot be named in this article.

Then there is a \$30,000 knitting mill to be built the coming spring in Carlisle, fifteen miles south of us, and the Buffalo Railroad lengthened two miles to Fair Forest, where a magnificent water-power will be developed and another magnificent

cotton mill built. Besides, the city council will grant a franchise for an electric trolley system connecting the outlying mill villages to our west with those to our east by way of our city and through the main street.

I can hear of many other enterprises and industries in formation for spring and summer.

All this has been accomplished within the past ten years, and still there is no speculation, land-booming or anything like it. People can make money here legitimately. There are no strikes, and none in contemplation. All seem perfectly satisfied, and there is no room here for kickers, mossbacks and chronic grumblers. We hope your inquiry can find all Southern towns as well off. We know of no paucity feeling around here, and have heard of none. **MACBETH YOUNG,**
Mayor of Union.

Twin Mayors Proud of Bristol.

[Special to the Manufacturers' Record.]
Bristol, Tenn.-Va., December 13.

Bristol, Tenn., and Bristol, Va., though having separate municipal governments, are one in point of business and industry, their interests in general being common.

The wonderful and healthy growth of Bristol, Va.-Tenn., can best be shown by some comparisons. For instance, in 1880 the total manufacturing, jobbing and retail merchandise amounted to \$1,862,000. In 1901 the total was \$14,928,000.

On July 15, 1890, there was due depositors by the banks of Bristol \$345,000; on July 15, 1902, there was due depositors \$1,025,000.

The clearings of our banks from July, 1890, to July, 1890, was \$4,575,000, while the clearings from July, 1901, to July, 1902, was \$22,600,000.

The railway earnings (Bristol proper) for 1890 amounted to \$225,848, and for 1900 they were \$988,435.

The value of our buildings (taken from the assessors' books, land values not included) amounted in 1890 to \$985,962, while today the assessed value of our buildings is \$3,019,982. These valuations, of course, are not, as a rule, equal to the real cost of the properties. The value of buildings erected the past season and now in process of erection is \$449,500.

The railways terminating here, realizing the importance of Bristol as an industrial and commercial center, have for the past six months been making extensive terminal improvements, including the erection of a magnificent and costly union passenger station.

The Bristol Board of Trade is now negotiating with several more manufacturing concerns, and feels confident that it will succeed in locating some of them. The outlook and prospects for Bristol's future and continued growth could not be more encouraging than they now are.

J. A. DICKEY,
Mayor of Bristol, Tenn.
W. L. RICE,
Mayor of Bristol, Va.

Filling Up With Enterprising People

[Special to the Manufacturers' Record.]
Cleveland, Tenn., December 12.

Cleveland is situated in Bradley county, Tennessee, on the main line of the Southern Railway. It is a town of 5000 population, the latter having increased 40 per cent. during the past twelve years. It has woolen mills, stove works, a coffin factory, a hardwood factory, two planing mills, two flour mills, a chair factory, two sawmills, employing a total of 1100 people. The town has five miles of pike streets, and the county 141 miles of pikes. County and town are fast filling up with enterprising Northern people.

The town also has a public-school system with an average attendance of 800 pupils, and Centenary Female College,

with an enrollment of about 300. There are Methodist, Presbyterian, Episcopal and Baptist churches, in all fourteen.

Future prospects of the town are very encouraging. Business is good. Cleveland is the market for four surrounding counties, including the cotton trade of North Georgia.

JOHN L. SMITH,
Mayor of Cleveland.

Johnson City Industries Running on Full Time.

[Special to the Manufacturers' Record.]

Johnson City, Tenn., December 13.
Johnson City, Tenn., is on the Southern Railway, and is the terminus of three railroads—the East Tennessee, Western North Carolina and South & Western, which is in course of construction on the south end, and work will very soon begin on the north end. This road will, within the distance of eighty miles, traverse the richest coal fields in the United States, and when completed will be a trunk line connecting Charleston, S. C., with Chicago, Ill., and will from both ends be a great feeder for Johnson City's industrial interests, which are already assuming important proportions.

In addition to our railroad facilities, we have one large steam tannery, two large veneering mills, foundry and machine shops, one furniture and heading factory, one stove factory, one ice plant, three planing mills, one large furnace, three large steam brick plants (and then do not supply the demand for brick), one large roller process flouring mill, and one plow-handle factory and other smaller plants. All are running on full time, and some are working night forces.

There is already an appropriation of \$1,500,000 by the national government for the erection of a national soldiers' home, one of the finest in the United States. Our city will be the gateway to the Appalachian National Park, the bill for the erection of which is now pending in Congress, and will doubtless become a law this Congress, carrying an appropriation of \$10,000,000. Our congressman, Hon. W. P. Brownlow, who usually gets what he seeks, has introduced a bill in Congress asking for \$100,000 appropriation for the erection of a public building in Johnson City.

We also have a fine system of waterworks, which furnishes the city with fine freestone spring water. We have a good electric-light plant.

There are many other advantages our city possesses which might induce home-seekers to locate, but time and space prevent my naming them. Our city has a population of about 6000, and is increasing 1000 or more per annum.

JAS. W. CRUMLEY,
Mayor of Johnson City.

Prospects at Nashville Never More Flattering.

[Special to the Manufacturers' Record.]
Nashville, Tenn., December 12.

The business outlook and general prosperity of our city is greater than it has been in years. There is scarcely a vacant business or residence house to be found, and more building is now being done than at any time in the past ten years.

The city has authorized an expenditure of \$600,000 to be made in sewers and permanent street paving, and this, of course, has given employment to a great many laborers. In addition to this, the Tennessee Central Railroad has recently been built into Nashville from a connection with the Cincinnati Southern at Harri-man, and is now being extended to a connection with the Illinois Central at Hopkinsville. Several hundred thousand dollars have been expended in the city in the purchase of land and in the building of terminal facilities and a belt line around the city for this road.

The litigation between the city and the United Street Railway systems has been settled, and approximately \$2,000,000 will be expended in the immediate future in improving and extending this property.

The educational institutions of Nashville, which bring annually not less than 5000 students to our city, were never in a more prosperous condition.

The hardwood lumber interests of Nashville, which make it now the largest hardwood lumber market in the United States, have been unusually prosperous during the past year, and the outlook for the future is still encouraging.

The large number of our manufacturing enterprises have been working full time, most of them double time, and orders still continue to be unfilled.

This same condition exists in many instances in the wholesale and retail trade of our city.

I have never seen the prospects for continued business activity and prosperous times more flattering. **J. M. HEAD,**
Mayor of Nashville.

Proud of Corsicana.

[Special to the Manufacturers' Record.]
Corsicana, Texas, December 17.

Corsicana has a population of 12,000. There are 500 producing oil wells here, and three large oil refineries, five wholesale grocery stores, three wholesale dry goods stores, three national banks and a private bank, with excellent schools, and the low tax rate of \$1.15 upon a property valuation of \$4,300,000. The school property is valued at \$150,000. Tuition is free. We have an abundant water supply. We are on the Cotton Belt Route, extending from Cairo, Ill., to Gatesville, Texas, and there is a branch from Corsicana to Hillsboro, being forty-five miles. The Rock Island extension from Fort Worth to Galveston, 274 miles, which will run through Corsicana, has already been located, and building will begin within sixty days.

E. O. CALL,
Mayor of Corsicana.

Chosen by the Packing Houses.

[Special to the Manufacturers' Record.]
Fort Worth, Texas, December 17.

Fort Worth is the county-seat of Tarrant county, and is the cattle center of North and Northwest Texas, and has a system of railway terminals unequaled in the State. All the main lines of the State come together at a common point. The Texas & Pacific Railroad Co. has expended nearly a million dollars on its terminals, and the immense volume of Texas traffic can be more easily handled in its yards at Fort Worth than at any other point in the State.

Messrs. Swift & Co. and Armour & Co. are erecting mammoth packing houses just north of the city for the slaughter of Texas live-stock.

Commission houses covering all the products of the State are located in the city, and are doing a thriving business. No city in the State has grown more rapidly during the past twelve months, and since the commencement of the work on the packing houses thousands of strangers have come to the city and many new firms covering all branches of trade. Fort Worth has a mammoth wholesale grocery business by reason of its unrivaled railway and distributing facilities. It has one of the most intelligent and progressive citizenships that ever built a city. It has the lowest death-rate of any city in the State by virtue of its artesian water supply.

T. J. POWELL,
Mayor of Fort Worth.

Fuel Problem Solved for Houston.

[Special to the Manufacturers' Record.]
Houston, Texas, December 18.

Houston has made great progress during the past twelve months, and today easily ranks as the leading city of Texas,

both in population and commercial importance. Within a corporate area of nine square miles the United States census enumerators in 1900 found a population of 44,633, as against 27,557 in 1890.

Immediately beyond the circumscribed corporate limits of the city are located a large number of extensive manufacturing industries, located there to escape municipal taxation, and the operators of these plants, to be convenient to their work, cluster around them, and they, together with the residents of suburban additions surrounding the city, all of whom do business in Houston, will easily swell the actual population to over 60,000, the last city directory for 1902 fixing the population by actual count at 58,203.

Houston has an assessed property valuation of \$31,287,027, twenty-five miles of paved streets, chiefly of asphalt; a sanitary sewer system recently installed at a cost of \$300,000, a healthful climate, a magnificent school system, police and fire departments that are practically upon a civil-service basis, and many other advantages making it a most desirable place of residence.

The business interests of the city are very extensive, comparing favorably with cities three or four times its size. There are six national banks and one private bank, with deposits aggregating \$10,000,000. The business done through the Houston clearing-house last year amounted to over \$466,000,000. The shipment of cotton from this city exceeds \$35,000,000 per year, and other industries, as lumber, sugar, cattle and rice, are not far behind the cotton industry in value. There are over 100 manufacturing concerns, some of them quite extensive. There are 253 corporations doing business in the city with an aggregate capitalization of \$126,905,249. The supply of oil in unlimited quantities from wells in the vicinity of Houston has solved the fuel question for this part of the country, and a large increase in the manufacturing business can be expected. Eleven railroads center in Houston, many of them important trunk lines, with the Rock Island now knocking at our door. Taking all the circumstances into consideration, Houston cannot fail to increase rapidly, and by the next census will show a population exceeding probably 100,000.

P. T. HOLT,
Mayor of Houston.

Danville Breaking Records.

[Special to the Manufacturers' Record.]
Danville, Va., December 15.

It affords me pleasure to say that there has been a very marked improvement in the various lines of business in our city. The advance in the price of tobacco, as well as the advanced price of all farm products, have given an impetus and confidence almost without precedent in the history of our city.

Our principal business is tobacco, and the present crop is unusually good, and is bringing the highest average obtained for many years. Since the commencement of the present tobacco year (September 1, 1902) a larger quantity, nearly 20,000,000 pounds, has been sold than was ever sold before in the same length of time.

During the past twelve months there have been more buildings completed than were ever completed before in any year of our city's history. These buildings include several handsome residences, many comfortable homes, the Masonic Temple, the Dudley Block, and the fireproof warehouse built by the American Tobacco Co.

A dam is being built across Dan river in sight of the city by the Dan Valley Power Co., which will cost \$250,000. This dam will supply the power to run a \$2,000,000 cotton plant and various other enterprises.

A furniture factory has been put in operation whose equipment is equal to any in the South, which, added to other enterprises of lesser importance, marks the progress of our city.

It is the impression of our business men that the outlook for Danville's substantial prosperity is most promising and flattering.

HARRY WOODING,
Mayor of Danville.

Its Future Could Not Be Brighter.

[Special to the Manufacturers' Record.]

Newport News, Va., December 12.

The general business of our city is good. Our merchants have no cause to complain in any line. Building has been active during the entire year. Two new churches and a number of fine business blocks and residences are now under construction. We have added about two miles of house sewerage to our city; have laid about three miles of block asphalt and bituminous macadam pavement. Real estate sales have been fairly good. The export and import business at this port has been very large, notwithstanding the coal strike, which has cut the coal trade at this port very much. Considerable coal is now coming in again, and there are many vessels in our harbor. The shipyard, our main industry, is now employing about 6000, with a pay-roll of about \$60,000 a week. We are now locating two large new industries, which will give employment to a number of people. No man who is a mechanic, such as a blacksmith, machinist, joiner, shipfitter and boiler-maker or building constructors, need be out of work in our city. We are the youngest city in the State. We have a population of 25,000, and growing fast. We have a schoolhouse in every ward in our city, and a high school. We have a fire department equal to any in the State, with all modern conveniences for fighting fire. Our police department is equipped with telephone and watch boxes and a patrol-wagon system. Our water-works will supply a city of 1,000,000 people. We have all the conveniences to be found in the larger cities. Our tax valuation is \$10,666,000, while our actual value is nearly three times that much. Our city, school and State tax is \$1.65 for \$100, as follows: City \$1, school 25 cents, State 40 cents. With cheap coal and with a wide and deep harbor that never freezes up in winter, and ship lines to the four corners of the earth, we have the best place for manufacturers to locate on the Atlantic coast. Our future could not be brighter.

A. A. Moss,

Mayor of Newport News.

Roanoke No Place for Idlers.

[Special to the Manufacturers' Record.]

Roanoke, Va., December 17.

Conditions at present in this section are what would be termed very prosperous.

Railroads are unable to transport with dispatch freight tendered them; manufacturers barely able to keep up with the demand for their products; coal operators utterly unable to fill orders; merchants enjoying a large trade, while the farming community is receiving high prices for all farm products, the farms being fairly productive during the year; labor actively employed; no tramps, and no place for idlers.

It is true the cost of living has increased largely, and the trend of the times narrows the age of activity to the laborer, and year by year those who are reaching middle age find it more difficult to get employment.

The demand for labor and the general employment have to a great extent overcome the increased cost of living, and altogether the lot of the laborer is better than at almost any time within the history of Roanoke.

It is true, however, that the develop-

ment and improvement of the Norfolk & Western Railway system is a great factor in our prosperity, at the same time Roanoke suffers for lack of small manufacturers.

No better place in the whole land can be found for the establishment of small industries. Female labor, young boys and middle-aged men could be employed to great advantage, which, coupled with the desirable climate, healthfulness of location in the midst of a rich and rapidly-developing section, and an abundance of the finest spring water in the world, must sooner or later be recognized and cause such small industries to be established here, which will insure to Roanoke prosperity of a substantial and lasting character.

JOEL H. CUTCHIN,
Mayor of Roanoke.

An Educational Center.

[Special to the Manufacturers' Record.]

Staunton, Va., December 18.

Staunton, Augusta county, Virginia, is situated in the famous Shenandoah Valley, about 200 miles from Washington, D. C., and about 135 miles from Richmond, the capital of the State, and is at the junction of the Chesapeake & Ohio Railroad and a branch of the Baltimore & Ohio Railroad, and has about 10,000 inhabitants, including the suburbs.

While Staunton is in the midst of one of the greatest agricultural sections of the State, still she is not entirely without manufacturing interests, having flouring mills, an organ factory, overall factory and other manufacturing establishments.

After all, however, she is principally a residential city, being an educational center for young ladies, and having the Mary Baldwin Seminary and the Virginia Female Institute and other institutions of learning.

Besides these schools, we have located here the Western State Hospital for the Insane and the school for the deaf, the dumb and the blind.

W. H. LANDES,
Mayor of Staunton.

Suffolk's Solid, Substantial Prosperity.

[Special to the Manufacturers' Record.]

Suffolk, Va., December 17.

Suffolk, Va., during the past year has enjoyed more good, solid, substantial prosperity than at any time during its history. The Suffolk & Carolina Railway Co., having its terminus there, has extended its line to Edenton, N. C., and is now building a line to Elizabeth City, N. C. The industries have been increased by the addition of a large meal mill, capacity 350 to 400 bags per day; the large ear and engine repair work of Bowen & Street, and the stove foundry of the Suffolk Stove Co. The Cobbs Bros. have doubled the capacity of their large knitting mills, and there have come many other small industries and residences too numerous to mention.

Suffolk is a progressive, up-to-date little city, and offers fine inducements to manufacturers. As a railroad center it is not excelled by any point in the South. Four large trunk railway lines run through it. These, together with its waterway, make it one of the best distributing points for manufacturing industries to be found in the South. It is the largest peanut market in the world. It is well lighted with electric lights, and has a splendid system of water-works and a good first-class system of sanitary sewerage. Its schools, colleges and churches are in a flourishing condition. The banking facilities are of the highest order. One of the banks located here is classed as the third strongest bank in the United States. It is surrounded by a fine agricultural country, the lands being exceedingly fertile and productive. With its facilities and natural advantages, there is nothing to prevent

Suffolk from becoming one of the largest manufacturing centers in the South.

R. L. BREWER, JR.,

Mayor of Suffolk.

Where Industrial Fuel Is Ready-Made.

[Special to the Manufacturers' Record.]

Clarksburg, W. Va., December 12.

West Virginia is one of the most promising States in the Union today, for the reason that it is a new and undeveloped State right at the gateway of the Eastern market, and I believe that I am safe in saying that Clarksburg, from its surroundings and natural advantages, is the most promising city in the State of West Virginia.

We have a population today of about 12,000. The city is located on the main branch of the Baltimore & Ohio Railroad, running from New York to St. Louis. The West Virginia Short Line Railroad gives us an outlet to the Ohio river at New Martinsville, W. Va. The West Virginia & Pittsburg Railroad has its terminal here, and penetrates one of the greatest timber and coal-producing districts, almost wholly undeveloped, in the State. The Monongahela River Railroad also terminates here. The reader can see at a glance that we have one of the best railroad centers in the State.

There are two natural-gas companies fully equipped to supply gas for domestic use and manufacturing purposes. The companies are furnishing the gas at the rate of four cents per thousand cubic feet, provided 10,000,000 feet are used per month, and on an average gas can be had for fuel at the rate of five cents per thousand cubic feet for all manufacturing purposes. We have more gas than we know what to do with today; the supply seems inexhaustible; in fact, we have the greatest gas field in the United States. There are hundreds of wells of high pressure in this district that are plugged awaiting a market.

I need to say little about our coal fields, for, as everyone knows, the whole of this section is underlain with the Pittsburg seam of coal, comprising hundreds of thousands of acres, which is just beginning to be developed and marketed. Yet West Virginia stands second in the production of coal.

We have five banks, a thoroughly-equipped electric street railway, seven wholesale houses, a large flour mill, two machine shops, a large tinplate mill, four glass factories and many other smaller industries of various kinds. The retail stores will compare favorably to those of any city of the same size. We have good hotels and boarding-houses, one hotel almost completed that will cost, including the site, a quarter of a million of dollars. Churches and schools are abreast with the industrial progress of the city.

Nowhere south of the Mason and Dixon line can capital find a better place of investment than Clarksburg, and nowhere can a man locate that will offer better advantages for himself from an industrial point of view or as a place to reside and to educate his children.

L. C. CRILE,
Mayor of Clarksburg.

FOR THE SOUTHWEST.

Mr. John H. Kirby on Louisiana and Texas.

Mr. John H. Kirby of Texas, in a letter to Mr. Tom Richardson, secretary-manager of the New Orleans Progressive Union, writes succinctly of the Southwest as follows:

"While very little of the tremendous immigration now going into Southwest Louisiana and Southern Texas comes from the extreme East, the people of New York who take an interest in investments have a way of keeping themselves thoroughly

posted, and they are fully informed that thousands of well-to-do farmers from Ohio, Kentucky, Illinois, Iowa and Missouri are moving into that section. This increased population will greatly augment the wealth of the cities and towns and add hundreds of thousands of dollars to the value of the agricultural products, and, of course, make investments of various kinds throughout Louisiana and Texas more desirable than in the past.

"As you are aware, there is no other kind of investment more popular at this time than timber lands. As the newspapers, however, of your State and those published throughout the States of Mississippi, Arkansas and Texas have printed hundreds of columns on this subject, I don't know that I can add anything of interest at present, unless it might be that many investors who have formerly paid no attention to timber lands and the industries which grow out of them are now seeking for securities of this character. It appears to me that it would be a great injustice to New Orleans, Louisiana, Texas, Mississippi, Alabama, Oklahoma, and I may say the whole Mississippi valley, to close up the New Orleans mint, and I do not believe Congress will take such action. I was told in New Orleans that a large proportion of the silver coinage had been minted at New Orleans, and certainly the great area of country which is tributary to the metropolis of the South uses a tremendous amount of subsidiary coin. There is a settled conviction in New York that enormous sums of money will be spent by the railroad companies of the United States in building additional mileage and making general improvements during 1903, and I do not believe any portion of the country will receive greater benefits from these improvements than Louisiana and Texas.

"We have been working for years in an effort to induce investors with surplus money to investigate the opportunities presented by the great Southwest. During the past few years many millions of dollars have found their way into Louisiana and Texas, and the amount of money coming in our direction is greater at present than ever before, but I believe that the next few years will witness a development along the western coast of the Gulf of Mexico that for solidity, permanency and rapidity will make a new record for the United States, and it is superfluous for me to say that New Orleans will be greatly benefited.

"The isthmian canal is now decided upon. Whether it is to be completed in five years, ten years or a longer period is an unimportant detail compared to the main point—a fixed purpose to construct it. With that point settled, the great minds of America will begin to formulate plans for utilizing the advantages which will accrue to the Gulf-coast country and put those plans into process of execution. That the South offers many inducements which cannot be presented either by the Northern section of the United States, Canada or the extreme Western portion of our country seems to be admitted by all, and I am absolutely convinced that 100 young men are advised by well-posted business men to go South to where five received such advice even ten years ago.

"I desire to again congratulate New Orleans upon securing the National Association of Manufacturers for April, 1903. This organization is, beyond any doubt, the greatest industrial body in the world, and the fact that the leading manufacturers of the United States have decided to hold their next annual convention in New Orleans is causing a great deal of attention to be paid to our section."

PROSPERITY FROM THE MANUFACTURERS' STANDPOINT.

Since the publication last week in the Manufacturers' Record of letters from many manufacturers and other persons interested in the development of American industry, a number of similar letters have been received. These maintain the hopeful spirit manifested in the others, and will be read with equal interest. They are as follows:

Would-Be Investors in the South Inquiring.

Robert Ross Zell, M. E., Birmingham, Ala.: "My business of examiner for the American Guaranty Co. of Chicago places me in direct contact with industrial enterprises in the Southland. I have never had so many inquiries from good reliable enterprises as in the past sixty days. Of course, there is some chaff with the wheat, but generally the outlook in the entire South is one of perfect confidence in both the present and future business conditions of this country. It is only when I go to New York with a proposition that I am informed that I must bear in mind that money is very tight and investors cautious; that unless my people will accede to the terms dictated by the money lender can I hope to sell the securities offered. What we need in the South is to be brought in direct contact with the purchasers of good securities, and not be compelled to go through Wall-street brokers and those institutions who compel the sellers of Southern securities to accept their terms, and who tell you of the great danger that is confronting the country of a collapse in the present great business prosperity, the object of which is to secure a contract for the purchase of securities at a low price. This is all the foundation there is in such statements. When the Southern people get to the point of recognizing this fact, and show in other industrial enterprises the same confidence they now have in cotton mills, then the necessity of going to Wall street will stop and the profits made on these securities will remain at home, to be invested in hundreds of new enterprises that will pay well here, because the finished products can be consumed at home. I am sure that a return to the old system of buying everything the South needs north of the Ohio and Potomac rivers would have just such an effect as these Wall-street people try to make us believe when talking of prosperity. But the New South is rapidly cutting loose from such conditions; we are becoming independent of both the Northern manufacturer and the foreign (imported) goods; we can raise all we need, and we will soon manufacture all we need, and as in cotton, so it will be in iron, steel and every other product and mineral that comes from the earth. The South has entered upon a term of prosperity that nothing can stop, and instead of the endless chain of emigration from the East to the West, it has commenced to move southward, and the next ten years' will show that prosperity is a fixed condition in the South. If you will figure the change of conditions in the South from 1890 to 1900 you will believe with me that we have before us eight more years of prosperity. New Year's Day, 1910, will find the South financially and otherwise closing the greatest ten years of prosperity ever known in any section of the world. This is my answer to your valuable inquiry."

The Best Year in Half a Century.

Walter M. Spaulding, vice-president and secretary of the Graton & Knight Manufacturing Co., Worcester, Mass.: "Our business for the past year has been very good; in fact, the largest in our half-century experience. As to the future, we believe

that while the 'cycle of prosperity' has run its accustomed length, and a financial stringency is due, the leading corporations of the United States are, as never before, so strongly buttressed by both good business and strong financial backing that there is more than a reasonable chance that business will continue good for the next two or three years. We think it will, therefore, be the policy of most manufacturers to continue to push their business operations, but at the same time to keep their financial affairs so well in hand that a sudden business collapse would not seriously disturb them. This, we think, is a reasonable position to take, and one that it would be wise for all concerns to adopt."

Prices Too High to Be Maintained.

A. H. Wood, vice-president and general manager Crooked Fork Coal & Coke Co., Petros, Tenn.: "We consider the outlook in our business very flattering, so far as the volume of business to be done is concerned. We are convinced that prices are too high to be maintained, and that there will be in course of the next year a falling off of the price in coal from 25 to 50 per cent., but with the increased volume of business which the lower price would induce the results will not be far different with the mine operator from what they are now. With large crops bringing good prices, putting abundance of money into the hands of the farmer, and our growing export and manufactured articles will certainly insure us prosperous times for at least eighteen months, if not for a longer period."

Enjoying All the Business That Can Be Handled.

W. P. D. Moross, general manager Chickamauga Cement Co., Chattanooga, Tenn.: "Locally our factories all seem to be enjoying about all the business they can handle; nor is our plant any exception. Furthermore, as the consumption of cement is a fair indication of a country's or of a section of country's prosperity, we take it that the same conditions exist pretty generally throughout the South. Our business is pretty fairly distributed over the Southern States, and at the present writing we are not only behind hand in filling our orders, but have booked business for more than 50 per cent. of our output for 1903."

Sound Enterprises Not Stopping.

W. T. Beatty, vice-president Austin Manufacturing Co., Chicago, Ill.: "The prospects in our trade were never better. There are no weak spots in the situation as far as we are able to discover. Our business is one which quickly responds to the condition of the times. We sell to a class of contractors engaged almost entirely upon new enterprises of construction, and one of the first signs of indisposition in the commercial or financial world is a shrinkage or stoppage in the new enterprises of a sound nature. There is no such sign on our horizon as yet, and we are confidently looking forward to a larger year's business in 1903 than ever before."

Export Trade Growing.

J. F. Winchell, vice-president the American Engineering Co., Springfield, Ohio: "We can see nothing in the business horizon that indicates to us any diminishing of the present prosperous conditions of the business world. Our business the past season has been more than double that of the preceding one. Inquiries are already being received by us and negotiations entered into by parties who require machinery for instalment next summer, such inquiries being fully three months in advance of the ordinary practice. Our machinery being very extensively used in cot-

tonseed-oil mills in the South, we naturally feel the effects of the stimulus given that industry by the high prices prevailing for their products. Our export trade (to which we have only recently commenced to give attention) is growing rapidly, and seems very promising. We attribute not a little of our success and busy condition to the fact that the general prosperity of the country makes it possible for the users of machinery to study quality first and make price the secondary consideration, and also they feel justified in discarding machinery which has been made and used for several years, and replace it with more modern and more efficient machinery. We know that this is true as applies to quite a number of our customers, and we believe that it is general in all lines of machinery builders."

A Better Crop Year Than Usual.

A. M. Gibbs, proprietor W. H. Gibbs & Co., machinery, Columbia, S. C.: "So far as this section is concerned, I am of the opinion that the present healthy situation, as well as the favorable outlook, is due to the natural causes in keeping with the general satisfactory conditions prevailing throughout the country, and especially to the rapid growth and development of the South, as well as, in a large measure, to the fact that this has been a better crop year than usual. At this time there is unusual activity in almost every branch of trade, and the prospect for 1903 is encouraging, for there is no good reason why, with the resources now at our command, we should not continue in our progress, and even if there should be any restraining factor short of a national calamity, we should be in a position to withstand its influence. A crop failure and low prices for farm products in 1903 would cripple our agricultural interests to a more or less extent, but as neither is probable, and we are not now, fortunately for us, so dependent on agricultural resources as we once were, there is no cause for alarm on that score. Taken as a whole, business conditions, present and prospective, are in a healthy state, and progress is being made rapidly, but on a sound and conservative basis—not out of proportion to the needs of the section."

Looking for Lower Prices.

J. C. Steele & Sons, brick machinery, Statesville, N. C.: "Present business is as good as we could wish, and present indications would point to an increased business next year. Speaking generally, however, we think business has reached the high-water mark, and while we do not look for a panic, we believe business will be a little more conservative and there will be a general lowering of prices, especially iron and steel."

No Adverse Conditions Visible.

Buffalo Forge Co., Buffalo, N. Y.: "Taking as a basis present orders and those in prospect in predicting the outlook for the coming year, it cannot be otherwise than better than ever before in the history of the line of goods manufactured by this company. This is the conclusion now voiced by most iron manufacturers with whom we come in contact. It has been said that at no time is there an absolute certainty of it not being possible for adverse conditions to illuminate the business horizon, but apparently there are no certain signs of this nature appearing as yet."

Gives Promise of a Prosperous Year.

H. K. Porter, Pittsburg, Pa.: "The outlook in the manufacturing line seems very bright, and to give promise of a prosperous year. In a great many lines of manufacturing orders now on the books take up nearly the whole of the capacity of the factories concerned throughout the spring and summer. Probably the princi-

pal difficulty in the way of selling goods is in the limited productive capacity. This will undoubtedly increase the import trade, and our export trade in manufacturing is, of course, seriously limited by this very strong home demand. This, however, will be helpful to the world at large, and America ought to rejoice that other nations enjoy prosperity as well as we, and give plenty to do to all skilled workmen. One feature of special interest in the present situation is the fact that prices have not risen so excessively as might naturally have been feared, and the excellent judgment in this respect of those controlling the great corporations is to be highly commended. One natural tendency of all such conditions is to force too rapid a productive capacity at a time when the cost of improvements is very great, and which will not be needed when the demand decreases. There seems to be, however, reasonable caution on the part of all manufacturers in this matter at the present time. The whole general condition of affairs seems very promising: the enormous volume of business is based primarily on immense crops, selling at good prices, for which there is great demand, and the returns of this product to the farmers enable them to buy largely to provide themselves with all the necessities of life and many of its luxuries. The return to labor is certainly greatly improved over what it has been, and this enables labor to make larger expenditures than usual; so that if the prices of food, clothing and rent can be kept from excessive advance, and natural laws are not interfered with by improper combinations, it would seem that little danger threatens us. The wild whirl of speculation is already curbed for the time, and it seems as if we may hope for general conditions of peace among the nations, minimizing the danger of panic."

Railroads and Industries Expanding.

Walter A. Zelnicker, president Walter A. Zelnicker Supply Co., St. Louis, Mo.: "Business in our line has kept up remarkably well, and from the amount of business that we now have on our books for delivery in the next twelve months, can say that business must necessarily be good next year. We find the railroads buying larger than ever; large corporations increasing their production, adding new buildings and new machinery. Taking everything into consideration, we think 1903 will be a banner year."

Activity in Southern Woodworking.

J. A. Fay & Egan Co., woodworking machinery, Cincinnati, Ohio: "The manufacturers and general business men throughout the country have all been blessed with prosperity, and it would be justifiable in saying that business of every kind and description has increased almost twofold in the past year. It is needless to say that the greatest activity has occurred in the South, and for the next few years it will show the greatest improvement of any section of the United States. All on the Western coast, from Seattle, Wash., to San Francisco, there has never before been such activity, especially among the lumber mills and in working of wood, in which this company is particularly interested. We believe the outlook for 1903 is very promising, and that the record for the closing year will be sustained. It would be no surprise if it were eclipsed."

High-Priced Material May Depress.

James McBrier, president the Ball Engine Co., Erie, Pa.: "The present conditions are good, considering the time of year. There is some doubt as to the volume of business keeping up to the present high level. High-priced raw material may have a depressing effect on consumption. Continued activity demands lower

prices on pig-iron, and makers of that article are getting too large a margin for general health of the manufacturing business."

Compelled to Decline Contracts.

Mell R. Wilkinson, secretary and treasurer E. Van Winkle Gin and Machine Works, Atlanta, Ga.: "In regard to our own business, that of the manufacture of cottonseed-oil-mill machinery and cotton-ginning machinery, we were offered this year many desirable contracts we were compelled to decline because we already had so much work that we could not see our way clear to tax our capacity more. Inability to secure material for which we had contracted and railroad delays in making deliveries handicapped us to a considerable extent. The year of 1902 has been so satisfactory from a trade point of view that we hardly hope for 1903 to equal it, yet we have fully as many inquiries for machinery for 1903 delivery as we were receiving this time last year. The buying capacity of the people is greater than ever before. Especially is this true of the laboring classes. Consequently, we are hopeful and feel reasonably sure that 1903 will be one more year of prosperity."

Bright Prospects in Different Lines.

W. P. Stevens, general manager and treasurer H. Stevens' Sons Co., Macon, Ga.: "Our business, as well as those we come in contact with, appears to be splendid, and we see no cause why it should not continue thus. Our territory covers six States, which gives us an opportunity of coming in contact with parties from a distance."

W. F. Warden, general manager the Burt Manufacturing Co., Akron, Ohio: "This company has had a very prosperous year, and looks forward to the coming year as being the best in the history of our business. The trade in our line in general throughout the world has been excellent, and we suppose that our competitors have enjoyed a very nice trade. We do not look to see a reaction in business for two or three years, and are making arrangements to push our line actively."

Caine & Platt, iron and steel by-products, Philadelphia, Pa.: "We are of the impression that there will be a continuation of the present active market for at least six months of the coming year. We believe that lower prices may continue for a short time, but our consumption is so heavy that we cannot but feel positive that there will be a return to higher prices."

E. H. Mumford, secretary and treasurer The Tabor Manufacturing Co., Philadelphia, Pa.: "Our impression, based entirely on the trade in our specialty, is that the outlook for 1903 is better than for any year we have yet enjoyed, and our incoming orders, even at the close of the old year, when manufacturers are prone to postpone purchases, justify this opinion."

Manning, Maxwell & Moore, New York: "So long as the consumption of iron is greater than the supply, and with the large amount of contracts that are on hand, running, in many instances, through the year of 1903, and with inquiries before us still up to the high-water mark, we don't feel any anxiety as to the future of business for the coming calendar year."

W. Graham, manager W. Graham Dry-Kiln & Stacker Co., New Orleans: "We anticipate in our particular line of specialties to enjoy a good business next year. As evidence of this fact, we are going to increase our facilities to take care of our trade the first of next year."

The sales in the Joplin (Mo.) district during the week ended December 20 were 10,830,820 pounds of zinc ore and 1,190,200 pounds of lead ore, valued in all at \$189,528.

BEAUMONT RICE AND LUMBER INTERESTS.

[Special Correspondence Manufacturers' Record.]

Beaumont, Texas, December 19.

Outside of its oil, Beaumont is a good deal of a place. Indeed, before the oil excitement began the town was thriving wondrously well on the strength of its recently-developed rice industry and its expanding lumber trade. These interests had brought the place up to a city of some 10,000 people, and its further growth was assured by the continued development of the rice lands surrounding the city. While the fierceness of the oil excitement drew the attention of the people away from the lumber and the rice for a time, these interests by no means retrograded, and now that oil has become a regular business and the field is passing into the hands of specialists, the earlier foundations for the growth of Beaumont are again receiving such consideration as is their due. Before eclipsed by the more dramatic oil boom the story of the swift growth of the upland rice industry around Beaumont was accounted a most interesting instance of Southern development, whereby lands considered fit only for grazing, and selling often for as little as twenty-five cents an acre, were proved to be capable of yielding a net profit of from \$15 to \$30 an acre when planted in rice. Northern wheat-growers, seeing so much greater profit in rice, came by hundreds and thousands into the section, and lands which previously had no sale were in demand at \$25, \$35, \$50 and even \$100 an acre, while the value of the crop raised around Beaumont increased from nothing a few years ago to more than \$1,000,000 in 1901, the year the oil came in. This year there were over 41,000 acres in rice in the Beaumont district, and next year it is believed the total will be more than 100,000 acres. Immense irrigating plants are being established to still further increase the rice acreage, one company alone, headed by Beaumont capitalists, having under way a plant which will add some 50,000 acres to the rice possibilities of the section. The main canal of this company will be large enough to float a ship, and the undertaking is being carried out altogether on a very broad and substantial plan. Another irrigating enterprise is important not alone because of the large number of additional acres it will bring as rice lands, but because it marks a new departure. It is being financed by men interested in the lumber business, and has for its object the utilization of lands that have been cut over and denuded of timber. While this canal begins eighteen miles east of Beaumont, at Indian Bluff, on the Sabine river, and runs fifteen miles southeast in Louisiana, it may be said to be a part of the Beaumont development. It is promised that the system of canals to be established will open about 50,000 acres of rice lands. While this is the pioneer enterprise of the kind, it is said that timber companies generally are now looking after the utilization of the lands after they have been cut over, a fact of great advantage to the country. Ditches are being cut and the land prepared for cultivation. Stump lands are said to make excellent pasturage. The additional wealth brought to the section by the utilization of the stump lands can be readily appreciated. Such lands are now assessed at \$3 an acre. If brought into cultivation as rice lands they would rank up with the \$35 land at least.

It is believed in this rice country that the development of the industry will continue indefinitely, without any decrease in profits. It is expected there will be a vast increase in the acreage of rice grown,

and enthusiasts like Colonel Morse of the Southern Pacific talk of an extension of the rice belt till it takes in all the country that can be flooded and drained between the Mississippi and the Colorado and for some miles inland. While Southwestern Louisiana and Southeastern Texas now raise two-thirds of the rice grown in the United States, whereas fifteen years ago they raised none of it, yet figures show that far less than half of the rice consumed in this country is raised at home. Besides, there is a great increase in the consumption of rice in this country, following the dissemination by the Southern Pacific and others of information as to the value of rice as a food, and it is pointed out that as the rice-growers of this section can raise more rice on less money than any other people of the world, the introduction of harvesters and other machinery giving them an incalculable advantage, they will soon be in a position to enter the markets of the world and compete even with the pauper labor of the Orient. Those rice fields are worked by hand, and one man can cultivate only about four acres, while in these fields of the Southwest one man can handle 100 acres. Twenty companies were organized in Texas last year to cultivate rice, and their capital was about \$2,000,000. It is inevitable that there shall be a large increase in this industry, and Beaumont, with its extensive facilities for handling the product and its promised deep-water navigation, will certainly be in a good way to reap a large benefit from the extension of the business.

The handling of a single crop, which is worth now to the farmers more than \$1,000,000 a year, and which is likely to be doubled in a short time, is something of a foundation of itself on which to build a smart trading and industrial center; and then on top of the rice and oil there is the lumber industry.

In a memorial which has been prepared for presentation to Congress on behalf of navigation through and around Sabine lake the statement is made that in Eastern Texas and Western Louisiana, the product of whose forests would naturally be largely shipped through Beaumont when made a deep-water harbor, there are 33,000,000,000 feet of standing merchantable timber. Twenty-five billion of this is pine, much of it long-leaf. There are within a radius of 100 miles of Beaumont some forty saw-mills which have a capacity of more than 3,000,000 feet daily. At Beaumont there are mills with a capacity of about 100,000,000 feet a year, and as the local demand is so much greater than the supply that lumber is constantly being shipped in from outside mills, the Beaumont mills are worked to their capacity all the time. Around these mills there have grown up woodworking industries, such as door, sash and blind factories, and there is one institution using 5000 feet of lumber daily in the manufacture of telegraph and telephone poles and arms and pins for the same. The organization of the \$10,000,000 Kirby Lumber Co., three of whose mills are at Beaumont, insures the systematic and energetic development of the lumber industry of this section, and it is predicted with confidence at Beaumont that a large export business will be built up from this port when it becomes a deep-water harbor. The export trade through Sabine Pass is already of good proportions, having been started during the years following '93, when the industry was affected by the domestic depression then existing, and the long-leaf pine of this section is in

great demand for numerous architectural and construction uses. The advantage to Beaumont which will come with the cutting of a channel through Sabine lake or of a canal around it sufficient to permit the passage of ocean-going ships up the Neches and to the wharves at Beaumont applies with great force to the lumber industry, which is now hampered by the extra cost of shipment from the mills to Port Arthur and Sabine Pass. That the relief sought will be afforded by Congress is the confident hope of the Beaumont people, as the expense will not be enormous, and the tonnage of lumber, rice and oil will immediately be of large proportions. The Neches is a very deep river in many places, and below Beaumont has a minimum depth of twenty feet, while an expenditure of \$20,000 would give a minimum depth of twenty-five feet and enable seagoing vessels to come right up to the town. The government has already appropriated \$125,000 to start the work of cutting a channel through the lake or of extending the Port Arthur canal around the lake from Taylor's bayou, and efforts will be made during the present session of Congress to have a route selected and an adequate appropriation provided.

In a recent address of welcome a Beaumont speaker asked that allowance be made for the present physical appearance of the city, as it is in somewhat the condition of a gawky girl who is neither child nor maiden, but who is filled with promises of future loveliness. This is, perhaps, not an inapt comparison, as not only the looks but the business conditions of Beaumont are in a transition state. There are some factories here, notably three large iron foundries and machine works, which have orders booked for six months ahead, and there are two brick plants, one with a capacity of 30,000,000 brick a year. It uses crude oil as a fuel, piping the oil direct from the field, and makes a most excellent brick, selling at \$8.50 a thousand. It was the first brick plant in the country to use Beaumont oil, and the experiment has been eminently successful. The native clay used is hard and rebellious, but with the 3000 degrees of heat secured it is possible to burn most thoroughly. One of the largest crosscutting plants in the country is located here, and there are minor and usual industries, amounting in all to about thirty, but there has been little development as yet of any of the numerous opportunities for diversified industries which the oil and the wood and other resources make possible. That all this will come with time no one who looks over the ground here can doubt.

But people have been too busy as yet to look after a well-rounded-out and harmonious development. So true is this that even in the customary direction of real-estate operations and building there has been less activity than the necessities would suggest. It is reported that good dwelling-houses rent at from \$65 to \$75 a month, and are hard to get at those figures, while the supply of cheaper houses is so altogether inadequate that hundreds of people are living in shacks and tents. Except in the matter of offices, which are in less demand since the departure of the mere promoters and fakirs, with a consequence that the over-supply of improvised offices has brought a slump in such rentals, the needs of the city are by no means supplied. This is indicated by the fact that rentals pay from 15 to 25 per cent. net on investments. These returns also indicate that real estate has not been inflated in value, and the further fact that prices are advancing continuously and are higher now than they have ever been proves the faith

of the people here in the future of Beaumont. The wild speculation in lands hereabouts seems to have been confined to outside property having or supposed to have oil beneath it, and it is a notable fact that Spindle Top acres sold for more per foot than business property in Beaumont. Inside business lots in Beaumont are now held at about \$300 a front foot, although some of the choicest could not be bought for \$1000 a front foot. As showing the trend of prices, I was told of a tract 60x120 which sold at the end of the boom last year at \$3500. Now a 40-foot lot alongside of it is held at \$10,000. A tract 120x120 sold a year ago for \$7000. It has since been resold twice at \$17,000 and \$19,500, and is held by the present owner at \$25,000. Lots three-fourths to one mile from the center of the city are selling at from \$500 to \$1000 a lot, 50x120. I am told there has been a general advance of about 25 per cent. in the values of Beaumont property in the past three months.

There have been some very creditable buildings put up recently, including a modern office building or two and a handsome opera-house, but hotel accommodations are still woefully lacking, and the government building is so cramped that there will be no room to spare even when the proposed \$90,000 addition is completed. It is pointed out that during the boom people were too busy to build, and that labor was scarce and materials high anyhow, but now that the whole town is getting down to straight business there promises to be a general readjustment to the changed and improved conditions.

People who were in Beaumont during the floods of early December will be rejoiced to see the completion of the public improvements which are now assured. Bonds for \$310,000 have been voted for various improvements, and with this expenditure, in addition to the \$115,000 now being spent, there will be two square miles covered with sewers and sixty-four blocks of the city streets paved. Property-owners are paving some residence streets at their own expense, and as some of the county roads are being macadamized and covered with oyster shells, it is possible that no such ordeal as pedestrians and teamsters passed through this winter will confront the people of Beaumont again. It is not unlikely that some of the streets to be newly paved will make a test of the asphalt which results from the refining processes now in operation here.

An electric street railway is in operation with five miles of track, and with an extension to the Burt refinery and the oil fields, and also to the residence suburb north of the city, will have about fifteen miles of road. It is only sixty days old, but is well equipped and well managed. Another line to Port Arthur by another company is under way. The president of the Beaumont Street Railway Co., a typical young Beaumont business man named I. D. Polk, is also at the head of the water-works company, which has bought out the old works and proposes to very much enlarge and extend the service.

Beaumont is very well supplied with railroads, and seems certain to get more. It is on the main line of the Southern Pacific, and also on the branch running from Beaumont to Nacogdoches, now being extended to Dallas. It also has the Kansas City Southern, which, with marvelous precision, Arthur E. Stilwell built into and beyond Beaumont long before the days of oil on Spindle Top. Then there is a branch of the Santa Fe, and all of the Gulf & Interstate which the Galveston storm left standing. Rumor has it that this line is to be put on its feet by some strong company and rebuilt into Galveston, and there are also rumors of other

lines getting into Beaumont, including the International & Great Northern, the Missouri, Kansas & Texas, the Frisco, and so on. One hears many rumors of railroad construction out in the provinces, some of which are well founded and others not so well, but it is easy to believe that possibilities of traffic would attract a road here if in this neighborhood and in the building mood.

Beaumont has five banks, which during the boom were the next busiest places in town. The first of January of this year the deposits amounted to about \$7,000,000. They are not so large now since the speculators have quit bringing money in here by the bale, but the ordinary deposits run about \$4,000,000.

In its cosmopolitan citizenship Beaumont is assuredly unique, not to say picturesque. While those who were in Beaumont before the oil excitement have not taken a back seat, and are still largely in charge of affairs generally, the new population includes all sorts and conditions of men, who have been attracted here from nearly every quarter of the globe, and many of whom were big men before they came here and are big men still. There is the far-famed ex-Governor Hogg, who has a law office here, and who, through holdings on Spindle Top, has become so deeply immersed in successful commercialism that he speaks as though the condition were embarrassing to him. One of his partners is ex-Senator Chilton, and another statesman who has left politics for Beaumont oil is the brilliant Chas. A. Towne, who was almost a running mate for Bryan in 1900. John W. Gates, while not a Beaumont, has a residence at Port Arthur, where he spends several weeks every year for the hunting and because he is so largely interested in the town and the Kansas City Southern road, and he may be seen on the streets of Beaumont and is banqueted at the hotels here on the occasion of these visits. And then outside of these men of fame, the rank and file of the people one meets are altogether out of the ordinary. The adventurer is today very rare. Most of those in Beaumont now are men who have been successes at home, and have come here simply because they believe they could do more with their money—it may be a few thousand or possibly a hundred thousand or more—than they could at home. Some of them are oil men from Pennsylvania or California, trying to unlearn what they find is of small value in their previous experience and to adapt themselves to conditions here. Some are young men who have branched out as brokers or taken up some other feature of the oil business as it presents itself today. Here you will find a man who knows the ins and outs of Wall street, and who is glad to put on rubber boots and be one with the busy throng on Spindle Top. There is another who grew tired of the monotony of life as a New York broker, with its trip to the office in the morning, back to the club in the evening, over to the Waldorf-Astoria for a few drinks with the boys and a look at the crowds, and then to bed. Men who know Paris and the Riviera and how they do things at Monte Carlo are among the oil and mud-bespattered throng one bumps into at every corner and in the stuffy corridor of the crowded hotel, and if you tire of the jostle and the fare of the hotel and seek one of the many boarding-houses which may be found, you are likely to find in your landlady a widow, lately thrown on her own resources, who has done Europe and the Continent, whose home was in Boston or New York, and who also has come to Beaumont because of its fame as a place where money-making opportunities abound. And although the days of the boom have gone,

and thousand-dollar bills are not so frequently encountered now as then, there are opportunities on almost every hand. Times are still flush at Beaumont, and the money circulates. With the prosperity which abides, and with the certainty of great developments in the industries of oil and rice and lumber, and all the business it creates to keep going the men engaged in these lines, it is small wonder that the Beaumont man believes his city is going to have 50,000 people right away and will continue to be one of the busiest, most prosperous little cities on the map.

ALBERT PHENIX.

CATCHING UP WITH ORDERS.

Interesting Feature of the Iron Market at Birmingham.

[Special Cor. Manufacturers' Record.]
Birmingham, Ala., December 22.

There are two distinct features of the local industrial situation—the usual holiday lull in sales and inquiries, and the struggle to get raw material enough ahead to avoid a lengthy shut-down next week. In iron circles there is little doing save on shipments of old orders. The demand for spot has fallen off because the foundries all take inventories on the first of the year and want to show as little high-priced iron on hand as possible when this is done. Sellers are not pressing, because they have all they can do to take care of orders on the books, and the only accumulation is because of a lack of cars.

An interesting feature of the market is the fact that many of the larger companies are making progress in the way of getting up with orders. It was noted last week that the Sloss-Sheffield Steel & Iron Co. expects to be out of the woods by the end of the year. Another big producer will have only something like 5000 tons to get out by that time. The head of this company tells the Manufacturers' Record correspondent that his company might have been out some time ago but for the fact that the furnaces have not in every case made the iron contracted for, and that if all iron made had been applied this way they would have been as well up as the Sloss Company. That iron was not applied was the fault of the buyer. He was told in every case save when the grade was higher than the order that he could have the iron if applied to sales. Many refused, and as a consequence this company has not been pushed to death. It has also made some high-class iron that has gone on the market at fancy prices.

One of the largest producers in the South, with headquarters in Birmingham, and said to be very much behind with orders, has no orders for January or February, having deliberately refused to take their hopping in this way to get ahead again. With the large output now it seems reasonable to hope that they will make a good showing on the contracts in the sixty days given free hand.

Every pressure possible is being brought to bear on the miners to make the holiday season short. It is hoped that they will take only three days, and at some mines two, so great is the demand for fuel. If the miners stop a week, as many fear they will, it will cause the banking of several furnaces in the district and a consequent loss of much time in filling iron orders. To head this off the mineral rail lines of the district are rushing in ore and coal and limestone as rapidly as the engines can be made to move it. It is hoped that in this way some offset to the miners' lay-off can be provided. The fear is that the whole body of the miners will agree to take only one or two days, but the men, not regarding the matter as of as much importance as it surely is, will refuse to get back to work before Monday.

There is still no abatement in the de-

mand for coke and coal, and both are selling at high prices. A representative of the only concern here that has had any coke for sale in some time says there is the same old cry, coke is wanted, and the price, anywhere in reason, is not talked.

A man well informed says there is no doubt in the world about the Southern Railway building shops and roundhouses at North Birmingham. The surveyors of the company have been here some time, and are running lines here and there over the property recently bought. Blueprints have been seen showing eight big buildings and several new tracks, and it is regarded by the people of that part of the city that the deal for big buildings is a go beyond question.

The first test of the machinery of the new Southern Soil Pipe Co. at North Birmingham has been made, and it is found to be in good working order. The first pipe will be made right after the new year opens. This is one of the largest plants of its kind in the South.

H. T. Beggs & Son will erect a pipe plant and iron-bed factory at North Birmingham, and make a large output of small pipe and beds. The investment will amount to something like \$35,000, it is heard, though details cannot be given out.

The Williamson furnace, which suffered a bad accident a few weeks ago, in which General Manager Edwards was killed, has gone in again and is making iron. So far the little stack has shown every disposition to do well and make a good output of high-grade iron.

Strange as it may seem, lumber, which was the first of the week rather dull, has picked up some in the face of the fact that the new year is hardly. The dealers are surprised at this, and seem to think that the outlook for the year is fine.

The appointment of F. O. Becker as general agent of the Frisco system is an indication that the officers of the line have something in view for this city. Mr. Becker is next to the general manager, and has power to do most anything in the way of improvements he likes. He is general agent of the whole system, which makes his location in Birmingham more important.

The Belt Railroad is building three miles to reach new industries in the district.
H. W. L.

United States Senator Louis E. McComas is convinced that he will secure at the next session of Congress for the widening and deepening of the main ship channel at Baltimore an appropriation commensurate with the importance of the undertaking.

McReynolds & Co., with headquarters at Chicago and St. Louis, have leased the large terminal elevator at the Mobile & Ohio dock at Mobile, and it is expected that Mobile will soon assume a position of importance as a grain exporter.

United States Consul-General A. D. Barlow reports that during the past twenty-five years half a billion dollars of American capital has been invested in Mexico by 1117 American companies, firms and individuals.

During the past twelve months the immigration department of the Southern Pacific system has sold in Louisiana and Texas 1,800,000 acres of land, bringing \$12,000,000 worth of investments into the two States.

The Merchants and Manufacturers' Association of Louisville, Ky., has re-elected Messrs. William Thalheimer, president; Douglass Barkley, vice-president, and John J. Telford, secretary and treasurer.

RAILROADS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

THE JELICO ROUTE.

About 100 Miles of Line Now Being Built in Tennessee.

The full extent of the Knoxville, Lafollette & Jellico Railroad, now being built, is shown in a letter received by the Manufacturers' Railroad from Mr. J. E. Wiloughby, chief engineer, whose headquarters are at Knoxville, Tenn. He writes that the main line now under construction from the Tennessee and Kentucky State line to the connection with the Atlanta, Knoxville & Northern Railroad at Knoxville is seventy-four and one-half miles long. A branch from the connection with the Atlanta, Knoxville & Northern is also being built to the Asylum-Street Depot, about one and one-third miles long. There is also under construction the Clear Fork branch, from the junction at the mouth of Hickory creek, in Campbell county, Tennessee, northeast up Clear Fork river, six miles; also a branch from Dossett, Tenn., via Oliver springs, to the head of Little Cow creek, twelve miles. The Louisville & Nashville Railroad is building a connection three and one-half miles long from Saxton, Ky., to the Kentucky and Tennessee State line, and this entire construction is expected to be completed next year.

A survey is being made for a branch line up the Laurel fork of the Cumberland river in Campbell county, Tennessee, and Bell county, Kentucky, to Chenoa, seventeen miles.

When completed the Knoxville, Lafollette & Jellico Railroad will, as heretofore stated, form a part of the new main line of the Louisville & Nashville Railroad from Cincinnati to Atlanta. This line will be composed of the Kentucky Central division of the Louisville & Nashville, the Saxton connection, the Knoxville, Lafollette & Jellico, the Atlanta, Knoxville & Northern and the Western & Atlantic Railroad, the latter being leased by the Nashville, Chattanooga & St. Louis Railway, which is controlled by the Louisville & Nashville.

RAILROAD DEAL.

Henry G. Davis Buys the Charleston, Clendennin & Sutton.

Advices from Pittsburg report the sale of the Charleston, Clendennin & Sutton Railroad, which runs from Charleston, Kanawha county, West Virginia, northeast via Clay Courthouse to Big Otter, in Clay county, a distance of sixty-five miles, the purchaser being ex-Senator Henry G. Davis of Elkins, W. Va., and associates. This road will, it is reported, be extended eastward to Beverly, in Randolph county, to connect with the West Virginia Central Railroad, which was recently purchased from Senator Davis in the interest of the Wabash system. The Pittsburg Gazette says that T. H. Given, president of the Charleston, Clendennin & Sutton Railroad, represented the owners, and that Arthur Lee and George E. Price represented Henry G. Davis and others. Among those interested in the road are Hay Walker, Jr., and E. J. Kelly of the Drake & Stratton Company of Pittsburg.

The capital of the line is \$3,000,000, and its bonded debt is of an equal amount. The directors include Messrs. Given and Walker, L. H. Partridge, G. T. Richards, A. C. Braun and John W. Moon of Pittsburg, C. C. Lewis and Malcolm Jackson of Charleston, W. Va., and Samuel L. Harman of Philadelphia, Pa. Mr. Lewis is vice-president; Mr. Harman, secretary

and treasurer, and J. Wainwright, general manager.

The road is a single-track line, and it is understood has a good passenger business, as well as large freight traffic. It runs up the Elk river valley through a rich coal and timber region. Some time ago it was reported that the Wabash would acquire the property.

LOUISVILLE & NASHVILLE.

All the Officers Re-Elected—New Men in the Board.

At the postponed annual meeting of the Louisville & Nashville Railroad six of the old members of the board retired, and were succeeded by an equal number of new directors representing the Atlantic Coast Line Railroad Co. The new members are Henry Walters, chairman of the board, and R. G. Erwin, president of the Atlantic Coast Line, both of New York; Warren G. Elliott, counsel of the Atlantic Coast Line, Warren Delano and Michael Jenkins, all of Baltimore; also D. P. Kingsley of New York. The old directors remaining are August Belmont, W. G. Raoul, John I. Waterbury and Walter G. Oakman of New York, G. M. Lane of Boston, Milton H. Smith, president of the Louisville & Nashville Railroad, and Attila Cox, both of Louisville. The board organized by re-electing all the old officers, including August Belmont as chairman of the board and Milton H. Smith as president of the railroad.

Announcement has been made that all the new issue of Coast Line stock necessary to conclude the purchase of control of the Louisville & Nashville Railroad has been subscribed by stockholders of the former company, and that the first payment of 25 per cent. has been made, amounting to \$2,656,250. The remainder is to be paid by February 14 next, making a total payment of \$10,625,000 as a result of the sale of 85,000 shares at \$125 a share.

WABASH AT BALTIMORE.

Work Started on the Western Maryland Extension to Tidewater.

The Degnon & McLean Contracting Co. has begun work on the tidewater extension of the Western Maryland Railroad (Wabash system) at Baltimore. This extension is to leave the main line in the western annex between Fulton and Walbrook stations, and, running southwest, will enter the Gwynn's falls valley, along which it will proceed to the terminal at Tidewater. The work is being done on Gwynn's falls, near the Claremont Stock Yards.

The plan for this extension is different from that first proposed. The other plan was to enter the Gwynn's falls valley by a branch from Howardville, several miles north of Walbrook station, but the new idea, while involving some heavy construction, will shorten the length of line to be built, and will tend to increase the importance of the Walbrook Station as a passenger depot. The extension will, immediately after leaving the main line, cross a ravine, and thence, by means of a cut, go under the Bloomingdale road, reaching Gwynn's falls at a point near Edmondson avenue. From that place to the proposed terminal at Fort Covington the line will be as heretofore described.

Will Develop Coal and Oil.

Mr. E. R. Miller, superintendent of the Licking River Railroad Co., writes from Yale, Ky., to the Manufacturers' Record concerning the extension of the line. He says:

"Our railroad this year has been extended six miles, making it twenty-six and one-half miles long. We have opened up about 10,000 acres of timber territory,

and have handled more freight than we ever handled. We are following the course of Licking river toward West Liberty, and have now only a few miles to build until we reach that point. We contemplate extending our line four miles next year, and by so doing will open up another lot of very good timber and oil country. We are now not over fifteen miles from West Liberty, which point we ultimately expect to reach, and when we do will open up the biggest field of canal coal in the State of Kentucky. Oil developments are very extensive at present all along our line from Ragland to West Liberty. The Cumberland Pipe Line Co. is at present laying its line from Salyersville to Ragland, and this pipe line runs parallel with our road."

Maryland & Pennsylvania.

Concerning the improvements on the Maryland & Pennsylvania Railroad, Mr. J. S. Norris, the general manager, informs the Manufacturers' Record that the company has nearly completed a revision of its line between Baldwin and Fallston stations, eliminating all heavy curvature and practically all wooden bridges within those limits. All of the wooden bridges excepting two will be replaced by fills. The exceptions are the crossing at Little Gunpowder, where a 150-foot span deck truss with plate-girder approach, will be used, and the crossing at Overshot, where a plate-girder bridge is now being erected. The total length of each steel bridge mentioned is 400 feet.

Mr. Norris says: "We expect the entire work to be completed by January. The cost will be approximately \$100,000."

Lexington Railway Earnings.

The Lexington Railway Co. of Lexington, Ky., reports earnings for November as follows: Gross \$20,899.60, increase \$449.13; operating expenses \$13,635.43, increase \$1976.46; net earnings \$7264.26, increase \$2472.68; interest and taxes \$4320.65, increase \$161.14; surplus \$2943.61, increase \$2311.54. For seven months, May 1 to November 30, gross earnings \$184,194.34, increase \$11,362.20; operating expenses \$100,156.34, decrease \$1960.17; net earnings \$84,038, increase \$13,322.37; interest and taxes \$30,765.42, increase \$1648.89; surplus \$53,272.58, increase \$11,673.48.

Deal Reported Pending.

A dispatch from Roanoke, Va., reports that a Philadelphia syndicate interested in the Lynchburg railways will probably exercise the right of an option held upon the properties of the Roanoke Railway & Electric Co. They have just made an inspection of the Roanoke lines, and the names of the party are F. H. Shelton, Robert M. Janney, Charles R. Miller, H. M. Sill, George Cappellet, John H. Catherwood, F. B. Lewis, D. T. Collins, D. K. Hartsman and Horace Magee. Accompanying them were J. D. Horseley, R. C. Blackford and R. D. Apperson of Lynchburg.

Deepwater Railroad Extension.

Preparations are being made to extend the Deepwater Railroad for a distance of twenty miles in Raleigh and Wyoming counties, West Virginia, and C. P. Howard, engineer in charge, whose office is at Beckley, W. Va., has advertised for bids for the grading, trestle-work and masonry. There will be some tunnel work, for the line will go through a mountain country. The Deepwater Railroad is connected with the Chesapeake & Ohio system.

New Freight Terminals.

The St. Louis & San Francisco Railroad Co. is reported to have purchased four-

teen acres of land at Kansas City Junction, in the suburbs of Memphis, Tenn., and it is understood that the company proposes to build shops and freight terminals. The Frisco already owns three acres of land adjoining its new purchase.

Leslie & Southern.

The Leslie & Southern Railway Co. has been incorporated to build south from the proposed terminal of the St. Louis & North Arkansas Railroad at Leslie, Ark., 120 miles, to Little Rock. Among the incorporators are George L. Sands, vice-president of the St. Louis & North Arkansas, and S. W. Lee of Harrison, Ark., its chief engineer. This proposed line will enable the St. Louis & North Arkansas to reach the State capital. Its extension from Harrison has progressed as far as the Buffalo river, thirty miles, which is about twenty miles north of Leslie.

Union Depot at Memphis.

A dispatch from Memphis reports that a meeting of all the railroads entering there has been called for January 6 to consider the question of erecting a union station.

Car Works in Mexico.

Press dispatches from the City of Mexico report that the Senate passed the House bill granting Isaac Hutchinson a concession to establish car works in Mexico.

Railroad Notes.

The St. Louis, Iron Mountain & Southern Railroad has completed a new depot at Judsonia, Ark.

The Fort Worth & Denver City Railway Co. has ordered 200 stock cars from the American Car & Foundry Co. of St. Louis.

W. W. Atterbury, superintendent of motive power, has been appointed general manager of the Pennsylvania Railroad to succeed J. B. Hutchinson, who recently resigned.

It is reported from Memphis that the Southern Railway engineers have begun the survey for the proposed new freight depot on Charleston avenue. The contractor for this is Fred B. Young.

M. L. Byers, engineer maintenance of way of the Baltimore & Ohio Railroad, has been appointed assistant to the general manager, and J. B. Dickson, formerly assistant engineer maintenance of way, has been promoted to the position vacated by Mr. Byers.

According to advices from Topeka, Kan., the White River line of the Missouri Pacific system, which is being built between Batesville, Ark., and Carthage, Mo., may be extended to Pittsburg, Kan., and connected with the Kansas, Nebraska & Dakota road, which is now owned by the Missouri Pacific.

A circular from the office of Mr. A. A. Allen, vice-president and general manager of the Missouri, Kansas & Texas Railway, announces that the company began operating its trains on December 20 over the line of the Dallas, Cleburne & Southwestern Railroad between Egan and Cleburne, Texas.

Mr. Lewis Kingman, chief engineer of the Mexican Central Railway, writes the Manufacturers' Record that the branch line from Ocotlan to Atotonilco will be 45.6 kilometers (about twenty-seven miles) long through a fine agricultural country. Atotonilco produces 600 carloads of oranges a year.

The Immigration and Industrial Association of Greensboro, N. C., has elected Messrs. C. G. Wright, president; J. W. Fry and J. S. Hunter, vice-presidents, and G. A. Grimsley, secretary and treasurer.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

To Manufacture Sea Island Cotton.

E. S. Matthews of Starke, Fla., writes to the Manufacturers' Record desiring detailed information regarding the best means of utilizing in manufacturing Sea Island cotton. He says:

"The Sea Island cotton-growers of this county are seriously discussing the establishment of a mill for the manufacture of the product of their fields, and I have been requested to ascertain as nearly as possible the cost of a factory that would work up the crop of the county. Thirty-six hundred bales is about an average crop for the county, though neighboring counties could be depended upon to materially increase this number if the factory was large enough to accommodate them. A factory here would, of course, have to be for the manufacture of such articles as are produced from long-staple Sea Island cotton, and there is a lack of information as to what particular line of manufacture could be most profitably engaged in."

A \$350,000 Addition.

Several weeks ago announcement was made that the directors of the Gainesville (Ga.) Cotton Mills had called a meeting for January 10 to vote on increasing capital stock from \$500,000 to \$850,000. It is now known that arrangements for the increase of \$350,000 have been definitely decided, and the meeting will be mere routine action. The increase is to be expended upon the erection of an additional mill, details as to equipment for which are now under consideration. Plans for the buildings required have been agreed upon. The company's present equipment is 25,200 spindles and 740 looms.

Adding 3500 Spindles.

Reference was made last week to the Great Falls Manufacturing Co. of Rockingham, N. C., as having increased capital from \$100,000 to \$150,000. This increase will be invested in new machinery, to consist mainly of 3500 additional spindles. The present building can accommodate this machinery. It now has 4524 ring spindles and 145 looms in position. About fifteen tenement cottages will be erected to house the additional operatives that will be required. Contract for furnishing the machinery has been awarded to the Howard & Bullough American Machine Co. of Boston, Mass.

A \$100,000 Silk Mill.

The Newport News Chamber of Commerce has closed negotiations ensuring the establishment of a silk mill at Newport News, Va. This plant will be erected by the Liberty Silk Co. of 546 West 57th street, New York city, and over \$100,000 will be invested. Local investors have subscribed to this amount of preferred stock. Further details will probably be announced in the near future. (The Liberty corporation is capitalized at \$600,000, and operates several large plants for manufacturing dress goods.)

The Cotton Movement.

In his report for December 19 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the

amount of cotton brought into sight during 110 days of the present season was 6,130,992 bales, an increase over the same period last year of 127,599 bales. The exports were 3,085,878 bales, a decrease of 39,922 bales; takings by Northern spinners, 887,449 bales, a decrease of 32,000; by Southern spinners, 754,762 bales, an increase of 76,398.

Wants American Cottons.

Alexandre Thursch, No. 13 Rue Grzybowska, Warsaw, writes to the Manufacturers' Record that he is interested in introducing into Russia American raw cotton, cotton yarns of high numbers, fine cambrics, white and colored; artificial wool, fine woolen cloths, tulles, lace, silk ribbons and cloths, rubber skeins, elastic ribbons, waterproof cloths, etc., and he would like to receive samples of same from American manufacturers.

Textile Notes.

Saxon Mills, Spartanburg, S. C., has declared a semi-annual dividend of 3 per cent. Company is capitalized at \$200,000.

It is rumored that C. B. Somerville of Staunton, Va., proposes forming company to build cotton factory. It is said it is contemplated to manufacture denims for the overall trade.

Durham Cotton Manufacturing Co., East Durham, N. C., has installed 300 new looms, replacing old looms. Further additions are to be made soon. The company has been operating 23,500 spindles and 692 looms.

It is reported that North and South Carolina and Northern capitalists have purchased Green River Shoals, near Salluda, S. C. Their purpose is said to be the development of the water-power of the property and the erection of a large cotton factory.

Messrs. Thomas G. McAllister of Fitzgerald, N. C.; B. K. Terry of Spray, N. C., and J. Worth McAllister of Charlotte, N. C., have incorporated the Imperial Company, with capital stock of \$60,000. Company's purposes are to manufacture textiles, deal in merchandise, etc.

The Columbus (Ga.) Manufacturing Co.'s increase of capital from \$400,000 to \$500,000, reported last week, is made to pay for the full equipment of machinery already installed, and is not to make any additions to the plant. Plant at present has 26,000 spindles and 800 looms.

Carlisle Knitting Mill of Carlisle, S. C., has been incorporated to establish plant by Messrs. D. Fant Gilliam, John A. Fant, J. S. Welch and W. H. Gist. The capital stock is \$30,000. The company will build the plant recently announced as projected by Fant Gilliam of Union, S. C., who is to be president.

The Proximity Manufacturing Co. of Greensboro, N. C., has announced that after January 1 the hours of labor in its mill will be reduced from eleven to ten hours daily. This action is adopted as preferable to continuing the present time with an increase of 10 per cent. in wages. There are 18,000 ring spindles and 1000 looms in the plant.

Anderson (S. C.) Cotton Mills is changing its machinery to produce a finer grade of goods than it has heretofore manufactured. Four-yard sheeting 56x60 has been the output. It is rumored that in connection with the improvements there will be added 7500 spindles. The output will be 100,000 yards of finished cloth after the betterments have been completed.

Articles of incorporation have been obtained under Maine laws for the Davis Cotton Mills, with capital stock of \$250,000. The company proposes building a plant at Munsey, S. C., on the Southern

Railway, three and one-half miles from Augusta, Ga. Messrs. W. B. Smith Whaley & Co. of Columbia, S. C., are the architects in charge. Charles Warren Davis, No. 2 Leonard Building, Augusta, Ga., has been chosen president, and states that the details have not all been decided as yet. (This enterprise was projected previously, but final arrangements have been delayed.)

Cottonseed-Oil Notes.

The new cottonseed-oil mill of the Shubuta Oil & Manufacturing Co. at Shubuta, Miss., began operations on the 19th, and will run day and night during the season.

The Dunn Oil Mills Co. at Dunn, N. C., has installed its machinery, and is now crushing seed and making oil. The company has a large stock of seed on hand, and its plant is one of the most modern in all its appliances.

The large oil mill of the Itta Bena Cotton Oil Co. at Itta Bena, Miss., began operations on the 18th inst. This mill has a capacity of 60 tons a day. The officers of the company are P. Cohen, president; J. L. Haley, vice-president, and J. M. Phillips, general manager.

The Fort Motte Cotton Oil Mill at Fort Motte, S. C., was organized last week, with R. E. Wannamaker of Stilton as president, A. R. Taber, Sr., of Fort Motte as vice-president and W. G. Peterkin of Fort Motte as treasurer and manager. A charter will be applied for at once.

The Texas market for cottonseed products has been quiet during the week. Exporters of cottonseed cake and meal report the closing down of many mills for the holidays, and there is very little product offering for the export trade. The price of crude oil has been advanced on account of the new duty imposed by the Mexican government, which goes into effect January 1, 1903. Galveston exporters report quotations as follows: Prime crude cottonseed oil, 32 cents f. o. b. Galveston, and prime crude, loose, f. o. b. Texas mills, 28½ cents; prime cottonseed meal, \$25, December, per short ton, and cottonseed cake delivered at Galveston, \$24.50.

The following are official quotations on cottonseed and cottonseed products, as posted at the Cotton Exchange in New Orleans on the 22d: Prime refined oil, in barrels, 36½ cents per gallon; off refined, in barrels, 35¼ cents per gallon; prime crude, loose, 31½ cents per gallon; prime cottonseed cake, \$22.75 per ton of 2240 pounds; off prime cottonseed cake, nominal; prime cottonseed meal \$26 per ton of 2240 pounds; off prime cottonseed meal, nominal; soap stock, \$1.15; linters, per pound, choice, 3¼ cents; A, 3½ cents; B, 3½ cents; C, 2½ cents. Cottonseed in sacks, delivered in New Orleans, \$13 per ton of 2240 pounds; in bulk, delivered in New Orleans, \$12 per ton of 2000 pounds.

At a meeting of the hickory axe-handle manufacturers of the country, held last week at Louisville, Ky., an association was formed for the purpose of arranging a uniform price-list. About 90 per cent. of the manufacturers were represented. A temporary organization was formed with Charles D. Gates of Louisville, president, and Frank Storm of Kirksville, Mo., vice-president. It was decided to hold another meeting in St. Louis January 10 to perfect a permanent organization.

Oscar Buttner, No. 13 Rue Montyou, Paris, writes to the Manufacturers' Record that he desires to represent American manufacturers of machine tools, taps and dies, chucks, house-furnishing goods and hollowware.

MINING.

Mining Notes.

Semi-anthracite coal has been discovered underlying 900 acres of land owned by W. E. Cotton nine miles from Dardanelle, Ark.

Buffalo River Zinc Mining Co., St. Louis, Mo., will develop North Arkansas zinc property. John H. Dickerson of Rush, Ark., has been appointed State agent.

The Stevenson Coal Co. has been formed to operate coal mines near Blaine, W. Va. W. P. Stevenson of McVeytown, Pa., is president, and John K. Wimbrough of Baltimore, Md., general manager.

Midvale Mining Co., recently chartered with \$100,000 capital at Montgomery, Ala., has made extensive purchases of coal and iron lands near Walnut Grove, which it is the intention to develop. Captain Amorine of Montgomery is at the head of this company.

J. C. Brydon Bros. Co., Bloomington, Md., has been incorporated, with \$100,000 capital, to mine coal and quarry stone. The incorporators are W. A. and S. B. Brydon of Bloomington, Md., and W. S. and L. B. Brydon of Philippi and Simpson, W. Va., respectively.

Mr. W. M. Dunn of Pennsylvania is in charge of the prospecting now being done on land bought recently by Pennsylvania parties near Isolin, Tenn., with a view to developing the same. Developments will begin in the spring if the results of the prospecting warrant it.

Messrs. R. A. Mitchell and W. H. Weller have purchased a large tract of coal-bearing land nine miles from Gadsden, Ala., on which a fine vein of coal some thirty inches in thickness is said to have been discovered. It is the intention of the purchasers to develop this property.

Wellsburg Coal Co., Wellsburg, W. Va. (W. G. Wilkins, Westinghouse Building, Pittsburgh, Pa., engineer), expects to begin mining operations next May with a daily output of 2000 tons. The machinery has not yet been ordered nor decided upon, although it will probably be electrical.

Flint Island Gold Mineral Co., Cloverport, Ky., has been incorporated by Mr. C. L. Fleck, Chicago, Ill., and Mr. C. B. Wight, Racine, Wis., for the purpose of developing gold-bearing land in Crittenden county, Kentucky, said to assay \$8.26 to the ton. Developments will begin in the spring.

Erskine Coal & Land Co., Wright, Raleigh county, West Virginia, has been incorporated, with \$1,000,000 capital, to do a general coal-mining business and to deal in timber, oil and coal lands. The incorporators are Alfred Jaffe, John Scott, W. B. Wilson, E. R. Edmonson and Fitzhugh Elder, all of Staunton, Va.

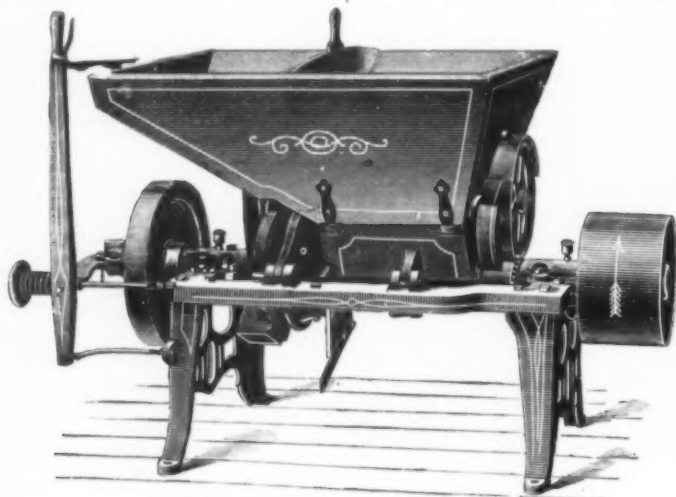
De Sota Coal Mining & Developing Co., De Sota, Jefferson county, Alabama, has been incorporated, with \$250,000 capital, to conduct a general mining business, sell or mine coal or other minerals, erect a saw-mill, manufacture various kinds of building materials and to build and operate coke ovens. The incorporators are B. C. Stevens of Clayton, Mo.; Charles T. Robinson of Sheffield and Hume F. Jones of Birmingham, Ala.

It is reported from New Orleans that the Mexican-American Steamship Co. has purchased two new steamers, one of which, the Malm, is completed and in service between New Orleans, Tampico and Vera Cruz. These vessels carry both passengers and freight, instead of only freight, as did the older vessels. The other new ship, the Dagfin, is being completed at Bergen, Norway.

MECHANICAL.

Bowsher Feed Mills.

No radical change has ever been made in the construction of Bowsher feed mills, although minor improvements have been added from time to time increasing the efficiency and adaptability of the machines for the different lines of work. They are built in a variety of sizes, ranging from two to twenty-five horse-power, and are sold with or without bagging elevator. The machine shown in the illustration is



BOWSHER FEED MILL.

of the type and size used with from sixteen to twenty-five horse-power.

The Bowsher mill has conical-shaped grinders. This shape secures a large area of grinding surface close to the center of the shaft, and insures a light-running mill. Aside from that, it makes it possible to run the mill empty without injury to the grinders.

The crusher knives are spiral in shape, and have a draw cut, reducing the cob with ease. The same spiral makes a force feed for small grain.

Several different dress of grinders are provided for different kinds of work. Millers will not ordinarily grind ear corn except when in good condition, but it is said that Bowsher mills will handle without difficulty damp ear corn.

Bowsher mills are well adapted to handling oats and all kinds of small grain, and will mix oats and ear corn together when desired and grind them at the same time.

The N. P. Bowsher Co., South Bend, Ind., is the maker.

Double Power Combination Saw.

The accompanying illustration shows the No. 2 combination saw table, manufactured by the Hermance Machine Co., Williamsport, Pa.

This machine has a new method of tightening the belt (patent applied for), consisting of a tightener having but one pulley, which rests on the loose side of the belt, the belt running from the arbor pulley to and under a rigidly fixed pulley in the frame to the driving pulley on counter, thence under the tightener pulley back to the arbor. With this method of belting the draft side of the belt is said to be tight at all times. The machine may be used as a cut-off saw, rip saw, mitre saw, bevel saw or for dadoing.

The countershaft may be either belted from above or below.

The saw may be brought forward a distance of twenty-four inches by the foot-treadle, allowing the operator to use both hands in handling the work.

The saw arbor is made of fine steel, and of large diameter. The saw carriage is mounted on wheels, and runs in ball bearings, which travel on two V tracks. These

bearings are so arranged that any lost motion is taken up and the saw can be kept in perfect alignment. The complete saw carriage is raised and lowered by means of spiral gearing controlled by a hand-wheel in front of the machine, convenient to the operator.

The right section of the saw table is hinged to the frame, and may be swung upward, thus exposing the carriage and all the working parts. The left-hand section is gibbed to the frame, and is moved to and from the saw or dado head by the means of a lever. This section of the

table can be securely locked to the frame in any position.

The cross-cut gauges are clamped to the table, and are so arranged that by loosening two nuts they are at once changed from stationary to sliding gauges, and can be set at any angle not exceeding 45 degrees. The gauges may be reversed, so that the saw will force the lumber against the face of the gauge if desired. On top of the cutting-off gauges is a round rod,

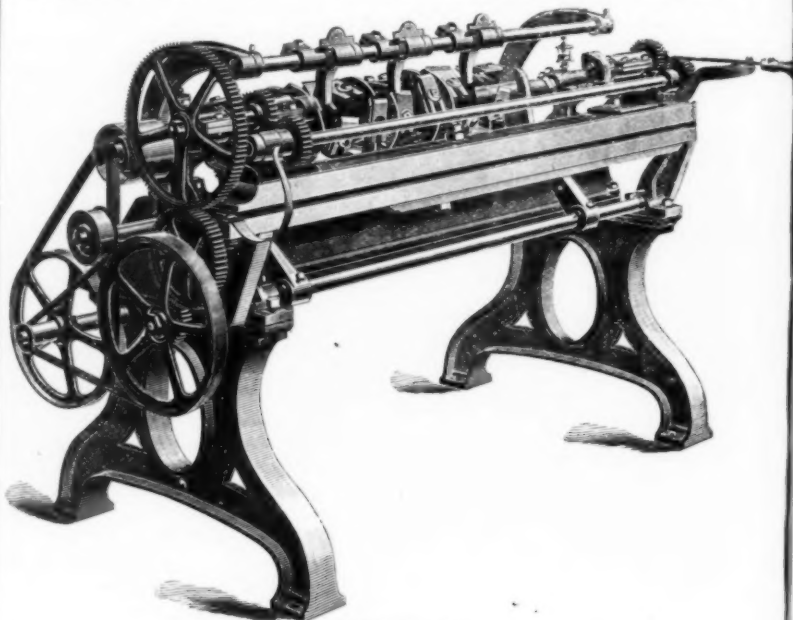
Every piece is numbered and lettered for convenience in ordering repairs.

No. 2 Ober Lathe.

The No. 2 Ober lathe, illustrated here, is adapted for turning hammer, hatchet, pick, sledge, double-bitted axe handles, whiffletrees, yokes, spokes, porch spindles, stair balusters, table legs, chair legs, ball bats and other work.

The patterns and stick to be turned are set in motion automatically when the carriage is tipped toward the head, and stopped when it is tipped back.

The work can be made larger or smaller by simply turning a bolt, and one end of the work may be changed without changing the other end. Knives may be moved in any direction on the heads. Part of the heads are provided with rings, which



No. 2 OBER LATHE.

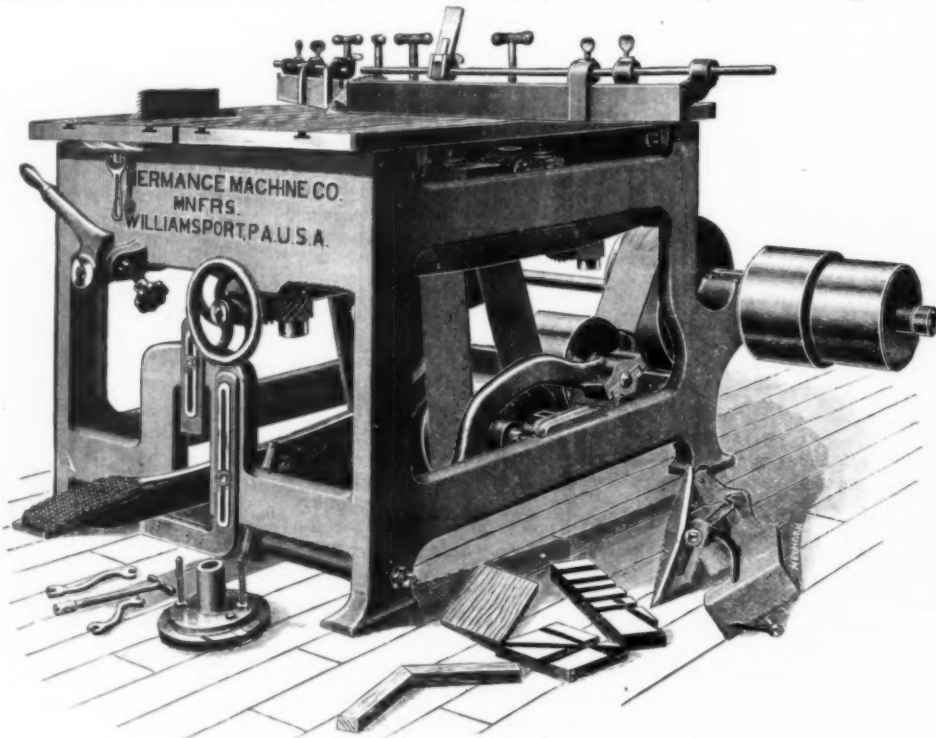
It is said to turn from 200 to 350 machinists' hammer handles or 200 to 250 spokes per hour, and other work accordingly.

The machine is designed to turn the work round, oval, square or any number of corners, or almost any other shape the whole length at once, or one end of the work one shape and the other end an entirely different shape at the same time.

prevent the knives from cutting too fast or gouging into the work.

Both of the centers that carry the stick to be turned are driving centers, which afford extra power for holding and turning the stick.

The lathes are made in three sizes, one to turn thirty-three inches long, one to turn thirty-six inches long and one to turn forty-four inches long. The 44-inch lathe



No. 2. COMBINATION SAW TABLE.

to which is affixed two stop-gauges, the first being hinged so that it can be thrown back out of the way where two lengths of material are being cut.

For cutting narrow strips, two sliding stops are arranged to govern the treadle so as to control the saw in narrow compass. By the use of a saw of proper diameter the machine will cut six inches thick.

The patterns for this lathe are made of wood about one inch thick; the shape of the ends of the article to be turned are put on the center that holds the stick. Patterns may be made and put on the lathe with little expense and loss of time.

These lathes are provided with adjustable back-rests, which can be made to press against the stick while being turned, helping to keep the stick from springing.

will turn yokes and whiffletrees up to forty-seven inches in length. The 44-inch lathe weighs 1600 pounds, the 33-inch 1400 pounds. They require about three horse-power.

These Ober lathes are simple, strong and durable. There are few parts to get out of order, reducing repair bills.

The Ober Manufacturing Co., Chagrin Falls, Ohio, has been very successful with

the manufacture and sale of these machines.

Myers Flexible Door Hanger.

Figs. 1, 2 and 3, accompanying this article, show different views of the Myers patented "O. K. Stayon" flexible covered door hanger, the newest product of the Myers firm in this particular line.

The pronounced feature of this flexible device is that it cannot be derailed, and that the door may be swung to an angle

construction of the building makes the use of the track as intended impossible.

The flexible feature of the Myers patent prevents binding where the door is warped or where the side wall of the barn is crooked.

High and Low Water Alarm.

The accompanying illustrations are self-explanatory. In the low-water alarm the "bell crank" lever connects the valve with the float, which by reason of its buoyancy

nance, lessen the waste of fuel, obviate stoppages and protect life and property by causing the water to be maintained at the proper level. These appliances are not expensive, and owing to the saving which they effect have been adopted by many of the large and progressive concerns. It is said that over 40,000 are in use.

The Reliance Gauge Column Co., manufacturer of high-grade steam specialties, 70 to 80 South Prospect street, Cincinnati, Ohio, is the maker.

Atlanta Water and Electric Power.

An important Southern hydro-electrical power-transmission enterprise has recently been projected by Eastern capitalists, having for its object the creation of an industrial center in its immediate vicinity and the possible ultimate development of an electricity supply system in the nearby cities.

The project involves the immediate construction of a concrete dam across the Chattahoochee river at the Bull Sluice Shoals, about fifteen miles from Atlanta, Ga., and the erection of a generating station at the dam containing a complete equipment of turbines, generators, exciters, switchboards and the necessary transforming apparatus for adapting the power to transmission purposes. The ultimate disposition of the power available has not been definitely determined, but for the present the entire output of the plant will be utilized by local manufacturing concerns. In the event of a sufficient demand for power at Atlanta, a transmission to the city limits may be installed, with a substation at this point, where the power will be transformed for local use in mills and factories located nearby.

The plant will have an ultimate capacity of 14,000 horse-power at the generator terminals, of which but 6000 horse-power will be available at the present time. The remaining 8000 horse-power will be installed as rapidly as is warranted by the local demands for power.

Steam railroad facilities are at present undergoing improvement for the accommodation of the new industries, which, as the result of the power enterprise, will undoubtedly be attracted to this vicinity.

A 10-mile branch of the Southern Railway extends from Chamblee, a few miles north of Atlanta, on the main line, to Roswell, a small manufacturing town located upon the Chattahoochee river, and but a few miles distant from the new water-power. A spur track between the powerhouse and the above branch road will furnish transportation facilities for the new industries.

The development of this undertaking involves an expenditure of over \$1,500,000, all of which has already been subscribed by the promoting interests comprised in the Atlanta Water & Electric Power Co. The company is incorporated under the laws of Georgia, and is officered by men prominent in hydraulic and electric-power enterprises, viz., S. Morgan Smith (York, Pa.), president; Forest Adair (Atlanta, Ga.), vice-president; J. J. Spaulding (Atlanta, Ga.), secretary and treasurer. The board of directors comprise the above gentlemen, together with C. Elmer Smith of York, Pa., and George C. Smith of the Westinghouse Companies.

The entire hydraulic work, including the erection of dam and powerhouse and the furnishing of the hydraulic machinery, will be carried out by the S. Morgan Smith Co. of York, Pa.

The electrical work will be designed and executed by Westinghouse, Church, Kerr & Co., engineers and auditors for the Atlanta Water & Electric Power Co. The electrical equipment will be furnished by the Westinghouse Electric & Manufacturing Co., Pittsburg, Pa., and the entire

power installation will represent the most advanced practices of these three well-known engineering concerns.

Previous to the final organization of the power company a commission of eminent hydraulic engineers was appointed to investigate the proposed location of the dam, together with the possibility of interference with the Atlanta city water-supply plant, located a few miles below Bull Sluice Shoals, and to make such recommendations as would insure the success of the enterprise. This commission comprised Mr. John Bogart, engineer of the St. Lawrence Power Co., Missena, N. Y., and Mr. William De La Barre, engineer of the St. Anthony's Falls Power Co., both of whom have been intimately connected with many important hydraulic undertakings. The report of this commission was entirely favorable to the enterprise as originally promoted, and the work is proceeding with all possible speed in entire accordance with its recommendations.

The dam will be constructed of cyclopean masonry, with concrete facings, and will be approximately 1100 feet in length, 50 feet high and 65 feet wide at the base. The geological formation of the river bed, which is hard gneiss rock, is peculiarly favorable to the hydraulic work, and presents a series of stepped rock surfaces perpendicular to the line of greatest thrust resulting from the pressure of water upon the up-stream face of the dam. Reinforcement of the toe of the dam against weakening by excessive abrasion will be accomplished by a row of steel rails embedded flush with the concrete face and bent to conform to the toe. During periods of excessive drought, for the purpose of augmenting the natural reservoir capacity, flash boards will be used. These will be so constructed that in the event of the hydraulic head exceeding a predetermined limit during freshets, the excess of water will be released, thus relieving the dam from dangerous pressure and preventing unnecessary flooding of the reservoir area above the dam.

The construction of the dam will be accomplished by the aid of overhead cableways suspended between anchorages upon the opposite river banks. Three of these will be used for the purpose of facilitating the work to the greatest possible extent and avoiding the delays and interferences due to high water or freshets. All rock used will be obtained in the immediate vicinity of the dam, and the entire work will be pushed to an early completion, possibly within eighteen months.

At each end of the dam will be located concrete bulkheads, each extending ten feet above the crest of the dam proper into one of the turbine penstocks, which are anchored. The powerhouse will be located immediately in the rear of the main bulkhead, and built upon the river bed. Seven steel penstocks, each twelve feet in diameter, extend from their anchorage in the base of the bulkheads to the wheel casings, a distance of fifty feet. These penstocks will be controlled by vertical sliding headgates operated through gearing from the crest of the bulkhead and protected by steel trash racks, provision for repairs being made by a series of steel frames for stop-logs, should these be necessary. Anchored sluiceways at the base of the bulkhead will be provided for taking care of water during construction of the dam.

The turbines are of the horizontal twin inward-flow type, manufactured by S. Morgan Smith Co. There will ultimately be seven pairs of 2500 horse-power each, in addition to two single exciter turbines of 250 horse-power each. The turbines are enclosed by a steel casing placed within the penstocks, with the steel draft tubes



FIG. 1.



FIG. 2.



FIG. 3.

of 45 degrees without in any way injuring track or trolley. It is unusually strong, and has a covered trolley, which affords perfect protection from the weather.

The Myers hanger is provided with roller bearings; the wheels are attached to the door by a steel strap clamped over the top of the door, extending down each side and bolted through. The material is malleable iron and steel. The finish is color and aluminum.

A loop joint between the wheel and the

presses upward, holding the valve closed so long as the water line is above the center of the lower gauge cock, but which, by reason of its weight, opens the valve, thus blowing the whistle whenever the water line goes below that point.

The low-water part of the combined high and low water alarm is like the low-water alarm, the float rod being bent so as to pass around behind the upper float. The high-water alarm is simply the low-water alarm reversed, the bell-crank lever



top of the door allows each door to be raised or shoved outward independent of the other, but when desired the door may be held rigid by means of the stay roller.

The track is heavy, high carbon, stiff steel, 3-16x1 1/4 inches, supported by a rigid bracket with square shoulder, mortised through the track every seventeen inches, making a substantial fastening and adding materially to the stiffness of the track. This track may be reversed (placed either side up), a convenience where the

being turned over so that the float simply hangs upon it as a weight until the water gets sufficiently high to lift it and blow the whistle.

The use of Reliance safety water columns is intended to furnish a check on the work of fireman and make it impossible for him to be careless, negligent, inattentive, intemperate or untrustworthy. The purpose of these appliances is to prevent boiler explosions, prolong the life of the boiler, reduce the cost of maintenance,

extending twenty feet below the powerhouse floor into the tailrace. The shafts extend into the generator compartment, there being direct-coupled to 1500-kilowatt Westinghouse revolving field alternating-current generators. A similar arrangement is employed with the exciter units, each of which is 150 kilowatts capacity, and capable of carrying indefinitely the entire excitation load.

The generators furnish current at 2200 volts and sixty cycles direct to the station switchboard, which is of the Westinghouse No. 11 type, embodying the most recent and approved forms of current metering and controlling appliances. A considerable amount of power will be furnished to local concerns directly from the station bus, thus avoiding transformation losses, but provision has been made for a complete equipment of 1500-kilowatt Westinghouse water-cooled transformers, which will raise the pressure to 22,000 volts for transmission should this be decided upon.

The present installation will consist of three 1500-kilowatt units, with exciters and the necessary controlling apparatus, but the entire power-house and equipment has been designed with a view to immediate extension when warranted by the demand for power. The enterprise is one worthy of the warmest support, and should prove strongly attractive to manufacturing interests in search of a suitable location where cheap and reliable power is available.

Proposed International Warehouse.

Transportation lines and trade interests centering in New Orleans are interested in the success of the international warehouse proposed for New Orleans by Col. Jerome Hill of Memphis. It is proposed to incorporate a company with a capital of \$3,000,000 to erect and operate at New Orleans two modern warehouses, one on each side of the river, to be equipped with all improved mechanical devices for unloading from cars, for storage and re-loading into steamships by electricity or compressed air. The promoters of the enterprise wish to make the undertaking so strong financially that its receipts will be negotiable, not only in this country, but in all countries where cotton is consumed, enabling manufacturers to purchase their cotton supply and to store it in transit with charges reduced by 20 or 30 per cent, below the cost for the same storage and service in any foreign port. The promoters write:

"Our country has grown in financial strength to such an extent that we are amply able to carry our own products, and with these warehouse receipts so protected the South would be blessed with a collateral that would equalize the rates of interest, a thing it has not possessed heretofore. The result of this system should give the American merchants the control of this enormous export merchandise direct to the different consumers of the world, whilst now it is largely controlled by other nations. Chicago dictates each day the value of grain and provisions that feed man; Pittsburg the value of iron and coal that moves man, and New Orleans should (as under this system she would) control the value of cotton that clothes man; then the United States would control the three great products that go to make up all of commerce, to wit, what moves, what feeds and what clothes mankind. The railroads entering New Orleans would be greatly benefited, as it would prevent the gorging of that market with the surplus cotton and give them ready use for their rolling stock, and their saving should be enormous."

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

LUMBER MARKET REVIEWS.

Baltimore.

Office Manufacturers' Record, Baltimore, Md., December 23.

The volume of business during the week has been light, and in all lines of the local lumber market there is no unusual movement. The feature of the week among lumbermen was the twenty-eighth annual meeting of the Baltimore Lumber Exchange, which was held at the Merchants' Club. The retiring president, Mr. Lewis Dill, presented his annual report, reviewing the business of the year. Mr. Dill presented the following statistics, which are significant, and show that the volume of business has been larger than any year in the history of the exchange: Receipts by water in back basin district, 52,867,672 feet; by water on private and steamer wharves, 202,000,000 feet; by railroads (14,586 cars), 154,200,000 feet, making a total of 409,067,672 feet. Exports of logs and lumber to the United Kingdom, continental ports, West Indies and other ports 49,672,000 feet, valued at \$1,543,161; lumber not classified, \$321,771; staves and headings, \$83,721, making a grand total of \$1,948,653. Including the shipments made direct from the mills by Baltimore operators, the total value for the year to November 1, 1902, is estimated in excess of \$16,000,000. In reviewing the business of the year Mr. Dill said: "For the year just ended the volume has been larger and the prices higher than are shown in the records of the exchange for any previous year. Neither the public nor the lumberman himself, perhaps, is fully aware of the amount of labor and the requirements in transportation which are involved in handling the 400,000,000 of feet received at Baltimore during the twelve months. After assorting and making ready this quantity of lumber for distribution and allowing that it should all come and go by rail shipments, it would require the use of 272 cars every day in the year, excepting only Sundays and holidays. These cars again would represent six fully loaded and average length trains—two miles long—arriving and departing daily from the city to handle this single commodity. We have gained 60,000,000 feet in the year's business, and beside the value of this in dollars, we have gained the very considerable increase in value on the entire trading, as compared with the previous year. Lumber for building and manufacturing purposes is as steadily in demand as at any time during the year, and will continue so as long as the commercial and general conditions remain as they are." The ticket presented by the nominating committee of the exchange was unanimously elected. It is as follows: President, H. P. Duker; vice-president, S. C. Rowland; treasurer, Joseph Owens; managing committee, R. W. Price, S. P. Ryland, Lewis Dill, S. C. Rowland, W. M. Burgan, J. L. Alcock, Norman James, J. L. Gilbert, E. P. Gill, L. A. Poehlman, J. T. Galvin, Daniel MacLea. Mr. Rowland, the new vice-president of the American Lumber Co.; Gen. Francis E. Waters, Mr. M. S. Bevan, Mr. Ridgeway Merryman, Mr. S. D. Helfrich, Mr. G. Schumacher, Mr. George E. Waters and Mr. Henry P. Duker retired from the managing board.

Norfolk.

[From our own Correspondent.] Norfolk, Va., December 22.

At this period of the season Christmas festivities and the closing up and audit-

ing of accounts for the year have a tendency to restrict operations in various lines of business. The lumber trade during the week has been quiet under these conditions, but the outlook is considered by manufacturers and dealers to be exceedingly promising in all branches of the lumber business. The year about to close has been one of unusual activity, especially in the North Carolina pine trade. The market has ruled firm throughout, while stocks have shown no accumulation, and the demand steady. At the moment manufacturers have all the business they can handle, and were it not for the climatic changes in the weather, shortage of cars and scarcity of vessels the volume of business would be materially increased. There is a good demand for hardwoods, and prices are well maintained. There is a good domestic demand for oak and poplar, both for domestic and foreign consumption. Foreign shipments for the present month have been quite liberal, and several consignments are booked for first half of January. Among all woodworking concerns here the year has been a fairly remunerative one, and the outlook is promising for additional activity in 1903.

Charleston.

[From our own Correspondent.] Charleston, S. C., December 22.

The movement in all avenues of the lumber trade of this port during the present month has been fairly active and the demand from all the usual sources very steady. At the moment business is rather quiet, as usual at this period of the season, but with the old year's business closed the new year is expected to open under favorable auspices. Prices for both yellow-pine and cypress lumber are firm, and buyers pay list figures readily. The movement among the mills at Georgetown is one of considerable volume, the demand for lumber being brisk and mills all busy. At interior points in the State there is a fair volume of trade reported, but scarcity of cars interferes somewhat with operations. The hardwood business is growing to be one of considerable importance, large bodies of timber lands abounding in all the commercial hardwoods being developed in different sections of the State, and mills are all well supplied with orders. During the past week the following shipments of lumber were reported: Schooner W. H. Perkins for Kingston, Jamaica, with 170,000 feet of lumber; schooner Nelson E. Newberry for New York with 530,000 feet of lumber, and schooner Warner Moore for Providence, R. I., with 328,000 feet. The Clyde Line steamers took out part cargoes of lumber—steamer Carib for Boston with 12,485 feet and Arapahoe for New York with 280 persimmon logs. The total shipments of lumber from this port since September 1 aggregates 26,138,794 feet, of which 25,379,794 feet were coastwise and 759,000 feet foreign, against 17,685,393 feet foreign and coastwise for the same period last year.

Brunswick.

[From our own Correspondent.] Brunswick, Ga., December 20.

The outward movement of lumber was stronger during the week just closed than during the previous week, the total shipments, both coastwise and foreign, amounting to 3,272,106 superficial feet. The coastwise cargoes consisted of 1,984,000 feet of pine lumber and 395,600 feet of cypress lumber, a total of all lumber being 2,379,600 feet; 42,500 pieces cypress shingles (amounting to 8320 superficial feet) and 4900 pieces railroad cross-ties (amounting to 222,501 superficial feet), making a total of 2,610,511 superficial feet. The foreign lumber ex-

ports amounted to 561,595 feet, consisting of 41,039 feet of sawn timber and 510,556 feet of boards, deals and plank, shipments going Spain. The arrival of several charters has somewhat relieved the dullness in shipments and enlivened the wharf fronts, which for nearly two weeks have been deserted of vessels to a great degree. There are about twenty-six now in port, all of which are loading lumber, both for coastwise and foreign delivery. Considerable business is anticipated with West Indian ports. Reports from mills at port and from interior points show satisfactory condition of trade, but at present many are short of labor, a usual condition prevalent during the holiday season, and which will curtail the output until about the middle of January. Freight to Eastern ports show a sharp advance to a basis of \$5.50 to \$6.25 on lumber, 16 to 17 cents on ties, Brunswick to New York. Charters are easier, but shippers are now waiting until the expiration of the holidays.

Mobile.

[From our own Correspondent.] Mobile, Ala., December 22.

The past week has been a fairly active one in all lines of the lumber and timber market. The timber market still maintains its strong position, and it is stated that sawn timber cannot be bought for 18 cents per cubic foot, and some are asking 19 and 20 cents for it. The cuts of several of the most prominent timber companies are not on the market, thus making Mobile manufacturers firmer in their views as to prices. Hewn timber is easier at 16½ to 17½ cents per cubic foot. The lumber market is strong and active, and the demand from River Plate is very decided, while a large fleet of vessels are now loading at the Gulf ports for that section. All the mills at Moss Point, at Wagar, Dolive and in the Pearl river district are crowded with orders. News reached the city last week from points along the Alabama and Bigbee rivers of the breaking up of hundreds of rafts of logs by the strong currents caused by freshets, and it is estimated that from 3000 to 5000 logs were rushing down the river. Receipts of logs here are liberal. The shipments of lumber last week aggregated 2,360,000 feet, and since September 1 shipments amount to 19,820,537 feet, against 25,905,300 feet last year. The following clearances were reported: Steamer Phoenix for Bordeaux, 2628 cubic feet of hewn timber and 13,763 cubic feet of sawn timber; steamer Zanzibar for Rotterdam, 7500 cubic feet of hewn and 1500 cubic feet of sawn timber and 164,534 feet of lumber; steamer Zanzibar also took 108,400 cubic feet of sawn timber to Grangemouth; bark Alaska for River Tyne, 66,750 cubic feet of sawn timber and 18,264 feet of lumber; steamer Maylands for Zaandam, Holland, 150,000 cubic feet of sawn timber; the steamer Phoenix also took 96,056 cubic feet of sawn timber for Manchester, England. The following quotations on lumber and timber were current at Moss Point last week: Cuban schedules, \$12 to \$13; South American, \$13 to \$14; prime lumber, \$11 up to \$25 and \$30; sawn timber, 40-foot basis, 18 cents, and hewn timber, 17 to 17½.

Lumber Notes.

The Wilson Cypress Mills at Palatka, Fla., which have been idle for some time installing its new power plant, resumed operations last week.

The formal transfer of the property of the Roseberry-Spencer Lumber Co. to the newly-organized American Lumber Co. was made last week at Mobile, Ala.

The British schooner Alani cleared last week from Jacksonville, Fla., for George-

town, British Guiana, with 223,715 feet of lumber, and the schooner Delta cleared for New York with a cargo of 9100 railroad ties.

Steam was turned on last week in the new dry-kiln of the Mills manufacturing plant at Raleigh, N. C. Sixteen thousand feet of one-inch pipe are used in heating the kiln, which has a capacity of about 40,000 feet of lumber.

The recent heavy rains have caused a 20-foot rise in the Licking river at Farmers, Ky., and immense quantities of logs, staves, etc., are being floated to market. All the mills and the stave elevator at Farmers have all they can do, and employing a large number of hands.

It is stated that an enterprise has been projected of establishing a large furniture factory at Lawrenceville, Va., to be known as the Lawrenceville Manufacturing Co. Two-thirds of the capital stock of \$50,000 has been subscribed by Norfolk citizens, and the remainder placed in Lawrenceville.

Messrs. White & Long, well-known saw-mill men of West Virginia, have located a saw-mill in the bottom, a short distance up Tug river from Welch, McDowell county, West Virginia. It will take about six months to finish up their lumber contracts, which covers the timber on the side of the mountain across Tug river from Welch.

At Berkley, Va., last week a force of men were engaged replacing the kilns at the Tunis Lumber Co.'s mills, recently destroyed by fire. The kilns are twenty feet high, twenty feet wide and 112 feet long, and are five in number. They are being constructed of brick, the walls of which are twenty inches thick, and are according to the latest plans of the underwriters and are fireproof.

The stockholders of the new pencil-factory enterprise at Shelbyville, Tenn., met in that city last week and elected the following officers: W. A. Frost, president; W. G. Evans, vice-president, and H. L. Wesley, secretary and treasurer. Satisfactory arrangements as to freight rates have been made with the Nashville, Chattanooga & St. Louis Railway, and the erection of suitable buildings will begin next week.

The Von Hardmuth Cedar Works, at Alton Park, near Chattanooga, Tenn., which was sold last week to the Gulf Red Cedar Co. of Richmond, Va., has been transferred to the Gurney Manufacturing Co., located at Roane Mountain, Tenn. The Gurney Company will control the plant and be ready to operate early in January, 1903. All the machinery of the company will be moved to Chattanooga, and the company will manufacture wood-split pulleys and wooden bowls. In addition to bowls and pulleys, the company will manufacture a full line of power-transmission appliances.

Transactions in timber land last week at Elkins, W. Va., were quite liberal in volume, and show that the most desirable timber rights in the State are being rapidly absorbed by millmen and investors generally. Among the deals said to be closed last week were the following: R. R. Rumbarger and Frank Rumbarger of Elkins purchased from ex-Senator Davis all the timber along the Fishing Hawk branch of the Cheat river at \$20 per acre. The property is said to contain 100,000,000 feet of timber. Ellenbarger & Yager of Pennsylvania have sold a one-half interest in their timber tract on Gladly river for \$36,000. The whole tract cost them \$10,000. Bell & Morrison have purchased the Peck land on the Greenbrier river for \$10,500, and the Boggess land for \$20,000. It is said they will build an immense lumber mill.

PHOSPHATES.

Phosphate Markets.

Office Manufacturers' Record,
Baltimore, Md., December 23.

The local phosphate market, like that of other fertilizer ingredients, shows but slight improvement, and the volume of trade will likely continue light until after the new year. The offering of rock is moderate, both Tennessee and Charleston being on the market. Receipts of nitrate of soda last week were 49,000 bags per steamer Janice from west coast of South America. The only charter reported for the week was the British steamer Glenmervin, 1803 tons, to load phosphate at Port Royal for the Continent on private terms. The advices from the Tennessee phosphate field report the market as very steady for both domestic and foreign rock. The adverse weather is restricting operations at the mines, and the several companies are shipping from rock stored in drying sheds. The stock of phosphate rock above ground is said to be very light. Advices from Florida continue very satisfactory, and the year closes with a fair record in shipments, and with the market showing an improvement over the same period last year. The market for South Carolina rock is steady, with some foreign inquiry, and several shipments are booked for continental ports during early January.

Fertilizer Ingredients.

The ammoniate market shows a slightly better tone as to demand. Inquiries from the South are more frequent, and it is expected that considerable business will shortly be developed with that section. The list of values continues to rule about steady. There is a strong market reported by Western packers, blood and tankage being firm.

The following table represents the prices current at this date:

Sulphate of ammonia (gns)...	\$2 97 1/2 @ 3 00
Nitrate of soda, spot Balto...	1 97 1/2 @ 2 02 1/2
Blood	2 52 1/2 @ 2 55
Azotine (beef).....	2 52 1/2 @ 2 55
Azotine (pork).....	2 52 1/2 @ 2 55
Tankage (concentrated).....	2 35 @ 2 37 1/2
Tankage (9 and 30).....	2 47 1/2 @ 10 1/2 2 50 & 10
Tankage (7 and 30).....	20 50 @ 21 00
Fish (dry).....	32 50 @ 35 00

Phosphate and Fertilizer Notes.

The steamship Maria cleared last week for Barcelona having 644 tons of Florida high-grade phosphate rock among her cargo for Genoa, valued at \$6430.

The imports of fertilizer material into the port of Savannah are growing each year more important, and have this year far exceeded those of last. Among recent arrivals reported are the bark Earl of Derby from Caleta Buena with 10,452 bags of nitrate of soda, the British steamship Vera from Huelva with 3822 tons of pyrites, the bark Nellie Troop from Caleta Buena with 13,306 bags of nitrate of soda (9846 bags of which went on to Wilmington, N. C.), and the British steamship Durlington from London with cargo of muriate of potash and manure salt.

A lease was filed last week at Mobile, Ala., made by the Baird Lumber Co. to the Crescent Lumber Co., of a tract of land fronting 1210 feet on the river, beginning at the south end of the north wharf. The Crescent Lumber Co. is given the right to build mills and other buildings necessary to the conduct of the lumber business.

The Garetson-Greaseon Lumber Co. of St. Louis closed a deal last week at Campbell, Mo., with the Campbell Lumber Co., purchasing 55,000,000 feet of hardwood timber and the plant of the latter company. The Garetson-Greaseon Company will put in a double-band mill and proceed to utilize the timber at once.

TRADE NOTES.

Addresses Wanted.—J. A. Mathieu, Georgetown, S. C., wishes addresses of charcoal buyers.

Timber Offered.—W. A. Ward, Iowa Building, Beaumont, Texas, offers 15,000 acres of good heart, short-leaf pine on the Sabine river, in East Texas, for sale at \$11 per acre. The average cut per acre is estimated at 8000 feet.

Cotton Factory for Sale.—The plant of the Rome Cotton Factory, consisting of a main brick building, 5100 spindles, 112 looms and 27 tenements, located at Rome, Ga., will be sold at auction February 3. For detailed information apply to John H. Reynolds, trustee, Rome, Ga.

Foundry for Sale.—George E. Lum, 1918 Morris avenue, Birmingham, Ala., offers a whole or part interest in a well-equipped foundry in Birmingham for sale. He states that this is a good opportunity for small capital, and that a large amount of work may be easily secured.

Wants Representatives.—The Renomous Sign Co., manufacturer of advertising signs, 617-619 West Pratt street, Baltimore, Md., wants good wide-awake agents in every city of the South. This firm manufactures signs from tin, iron, waterproof brass, nickel, cardboard and aluminum.

Removal of Offices.—Robert T. Mickle, M. E., representing H. R. Heinicke, manufacturer of radial hollow-brick chimneys, and Herron & Bury Manufacturing Co., air compressor manufacturer, has removed his offices to 335 Drexel Building, Fifth and Chestnut streets, Philadelphia, Pa.

Installation of Heating Apparatus.—The American Blower Co., Detroit, Mich., is building heating apparatus for the Iron City Sanitary Manufacturing Co. at Zellenople, Pa.; Enterprise Manufacturing Co., Columbiana, Ohio; B. F. Lee Co., Braddock, Pa.; Monongahela (Pa.) Forge & Furnace Co.; New York Glucose Co., Edgewater, N. J., and the Michigan Malleable Iron Co., Detroit.

Otis Elevators.—The Otis Elevator Co., New York, N. Y., recently closed the following contracts: Ten hydraulic passenger elevators for the extension of the Manhattan Life Insurance Co.'s building, 64-70 Broadway; eight hydraulic passenger and two hydraulic freight elevators for the Barclay Building, Broadway and Duane street, and four hydraulic passenger elevators for the store of Frederick Loeser & Co., Brooklyn.

Hawley Furnaces.—Brookside Cotton Mills, Knoxville, Tenn., is about to install a complete and efficient power plant. It will use Green economizers, Foster superheaters, Hawley down-draft furnaces and various other steam-plant refinements. This equipment was selected by Mr. W. T. Lang, agent for the company. The furnaces were sold by the Atlanta office of the Hawley Down-Draft Furnace Co., 816 Empire Building, Atlanta, Ga.

Visit Foreign Representatives.—Mr. Richard D. Gottlieb, secretary and chief engineer of the General Supply & Construction Co., 8 and 10 Bridge street, New York, sailed Monday, December 15, for Europe on the steamship Deutschland. Mr. Gottlieb expects to be absent four or five weeks. While abroad he will visit the offices of his company in Manchester, Paris and Antwerp, but most of his time will be spent at steel mills in Germany, for which his company is the American representative for rails and structural material.

Increasing Facilities.—The S. B. Alexander, Jr., Company, Charlotte, N. C., has outgrown its old quarters, and recently removed to No. 18 East Fourth street. The size of its present building is 38x105 feet. Besides carrying a complete line of electrical supplies, it has added engines, heaters, tools and a large stock of machinists' supplies. It also carries textile supplies, including belting. This concern has had a remarkable growth until today it is one of the largest and best-known houses in the South. The firm is well and favorably known to the mills throughout the South, with whom it has a large business.

T. Wilce Company.—The hardwood flooring business of the T. Wilce Company, Twenty-second and Throop streets, Chicago, Ill., was founded in 1873 by Mr. Thomas Wilce. The present plant of this company occupies more than half of an entire block, and contains, aside from other machinery, twenty-two strictly flooring machines, from which the output is 75,000 feet of hardwood

flooring per day. A large export business and an extensive business in maple flooring has been conducted by the Wilce Company for years. The capacity of the yards is 20,000,000 feet, which amount of lumber is annually handled by this firm, taken in in the crude state and turned out hardwood flooring.

Ice Plants.—Sterling Iron Works, Springfield, Mo., has completed a cold-storage plant for the Ozark Cold Storage Co., Mountain Grove, Mo., having a capacity of 20,000 barrels of apples, besides freezing room. The plant is equipped with one of the F. Ling ammonia compressors, and is giving satisfaction to the company. The Siloam Springs Cold Storage & Ice Co., Siloam Springs, Ark., has completed its new ice and cold-storage plant, the machinery for which was furnished and installed by the Sterling Iron Works, Springfield, Mo., this company furnishing one of its Sterling 40-ton refrigerating machines, together with two 125-horse-power boilers. The contract also includes a small lighting plant and elevator. This plant has a capacity of making twenty tons of ice per day and cooling 300,000 cubic feet of storage space.

Filter Plant for Mysore, India.—The New York Continental Jewell Filtration Co., Mills Building, New York city, N. Y., has closed a contract with the Maharaja of Mysore, India, through Capt. A. J. de Lotbiniere, Royal Engineers, English Army, who was sent from India to New York by his government for that purpose. The filter plant is to consist of four Jewell gravity filters, each twenty feet in diameter, constructed of granite laid in Portland cement. There will be a masonry subsidence basin holding 400,000 Imperial gallons. The capacity of the filter plant is to be 2,600,000 United States gallons. It will be erected early in the spring by one of the filter company's engineers. It will be located at Bowringpet, in the Kolar gold fields, near Bangalore, Mysore. Mr. E. B. Weston, A. S. C. E., is consulting engineer.

Hardware Specialties.—Cumberland Foundry & Machine Co., Nashville, Tenn., is manufacturing an extensive line of hardware specialties, structural iron, railroad castings and a ball-bearing corn sheller. In the Advance ball-bearing corn sheller, which is now being placed on the market, the knives rotate around the cob, which, by means of the polished tool-steel balls, is a rapid, light-running and durable machine. By an arrangement of the corn chute the spoiled grain is thrown away without interfering with the shelling. The machine is said to have a capacity of from fifteen to twenty bushels of corn to the hour. Since beginning operations in June the company has found it necessary to double its capacity, and now purposes putting in another cupola, on which, complete with blower, it wishes bids from manufacturers.

Pure Water for Factories.—Manufacturers throughout the United States are becoming more and more interested in the subject of pure water. They are beginning to realize the benefits derived from the use of clear, pure water in the manufacture of their various products. Cotton and textile works, steel and paper mills are now unanimous in the conclusion that pure water is just as much a necessity as good material or fine workmanship; also that the degree of perfection of their manufactured product, likewise the factory cost, are both affected by the quality of the water supply. A few years ago filters and filtering systems were regarded with suspicion, and comparatively few of our large manufacturing concerns cared to experiment with them. Today, however, a filter of some sort is frequently considered to be as necessary a part of the equipment of a modern plant as the boiler or engine. Filtration has passed the experimental stage, and has become a decided success. Wm. B. Seafie & Sons Co., of Pittsburgh, Pa., manufacturer of gravity and pressure filters for every industrial purpose, is just closing one of the most successful years of its career of more than a century. A few of the larger plants recently installed by Wm. B. Seafie & Sons Co. include the W. D. Boyce Paper Mills Co., Marseilles, Ill., 1,000,000 gallons capacity; Lancaster Mills, Clinton, Mass., 1,000,000 gallons; Union Steel Co., Donora, Pa., 100,000 gallons; Thomas Phillips Paper Co., Akron, Ohio, 350,000 gallons; Imperial Brewing Co., St. Louis, Mo., 100,000 gallons; Cleveland Laundry Co., Cleveland, Ohio, 100,000 gallons; Walker & Williams Manufacturing Co., Cohoes, N. Y., 100,000 gallons, and Hartford Rubber Works Co., Hartford, Conn., 150,000 gallons. The satisfaction these installations are giving recommend them especially for factory purposes.

CONSTRUCTION DEPARTMENT.

THE MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in a town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and it is often advisable to add the names of one or more incorporators as an aid to the postmaster in delivering mail.

ALABAMA.

Birmingham—Iron Pipe and Bed Works.—H. P. Beggs & Son will build plant for manufacturing iron piping and iron beds, about \$25,000 to be invested.

Birmingham—Realty.—Incorporated: Alabama Realty Co., by E. C. Hewes and R. C. Booth. The capital is \$10,000.

Centerville—Lumber Plant.—Farrior Lumber Co. is being organized to build plant. C. E. Farrior will be manager.

De Sota—Coal Mines.—Hume F. Jones of Birmingham, Ala.; Charles T. Robinson of Sheffield, Ala., and B. C. Stevens of Clayton, Mo., have incorporated De Sota Coal Mining & Development Co., with capital stock of \$250,000, to develop coal mines, etc.

Gadsden—Coal Mines.—R. A. Mitchell and W. H. Weller have purchased coal lands on Lookout mountain, and will open mines.

Hardyville—Lime Works.—Keystone Lime Co., reported incorporated (under Birmingham) recently with \$25,000 capital, has purchased plant at Hardyville. Capacity is 400 barrels daily, and the plant will be improved.

Montgomery—Fertilizer Factory.—The recent report that John W. Hugger proposed organizing a \$1000 fertilizer manufacturing company was an error.

Montgomery—Ice Plant.—A \$125,000 stock company will be incorporated to build ice plant of 100 tons capacity daily and to take over the People's Ice Factory, which has fifty tons daily capacity. Contract for erection of the 100-ton plant has been signed. H. C. Davidson, J. R. Kelly, W. F. Vandiver, R. M. Henderson and others are interested. T. H. Moore will be president.

New Decatur—Plow Factory.—A Mr. Baker of Burden, Ind., contemplates establishing plow factory.

Valley Head—Iron Furnace.—Valley Iron Co. has received plans and specifications for construction of its proposed 200-ton iron furnace. It is expected that contracts will be awarded soon. Offices at 224 First avenue, Birmingham.

Walnut Grove—Coal and Iron Mines.—Midvale Mining Co., recently chartered with \$100,000 capital, has purchased and will develop coal and iron lands near Walnut Grove.

Capt. A. M. Amerine of Montgomery is president.

Wylam—Steel-car Works.—Southern Car & Foundry Co. is considering the erection of a steel-car plant at Wylam, but will not make a definite decision until next year. Important improvements are now being planned for the works at Gadsden and Anniston, Ala.; Memphis and Lenoir, Tenn. J. M. Hansen of Pittsburg, Pa., is president; company's general offices at Birmingham.

ARKANSAS.

Antimony—Antimony and Zinc Mines.—American Antimony, Zinc Mining & Milling Co. has filed certificate of incorporation evidencing its intention to develop antimony and zinc mines in Howard county. Paul Krod is agent.

Dardanelle—Coal Mines.—W. E. Cotton is reported as to develop coal mines.

Dardanelle—Cotton-oil Mill.—Arkansas Valley Cotton Oil Co., mentioned last week as increasing capital \$40,000, will expend about \$15,000 enlarging its mill, and probably erect one or two large gin plants.

Hot Springs—Remedial Company.—Chartered: Hot Springs Remedial & Vitalizing Co., with capital stock of \$5,000,000. Homer Pennock is president; Geo. B. Cook, vice-president, and John H. Lewis, secretary.

Felsenthal (not a postoffice)—Townsite Company.—Incorporated: Felsenthal Land & Townsite Co., capitalized at \$300,000, to develop a town at the junction of the Bastrop & El Dorado Railroad with Ouachita river. Adolph Felsenthal of Camden, Ark., is president; George W. Hays of Union county, Arkansas, is secretary. Others interested are C. G. Vaughn of Vicksburg, Miss., and Neill C. Marsh of El Dorado, Ark.

Little Rock—Liquor Company.—Sandefur-Julian Company is increasing capital stock from \$25,000 to \$50,000; J. B. Sandefur, president.

Little Rock—Lumber Plant.—H. A. Rose Lumber Co. of Paducah, Ky., capitalized at \$30,000, all of which will be invested in Arkansas, has filed copy of charter. J. H. Carmichael of Little Rock is State agent.

Pine Bluff—Pearl-button Factory.—Standard Button Co. of Erie, Pa., is examining the mussel shells of the Arkansas river with a view of establishing plant to make pearl buttons.

Pine Bluff—Real Estate.—Chartered: Arkansas Valley Real Estate Co., with Z. Orto, president; Charles Well, vice-president; J. E. Boyce, secretary and treasurer. The capital stock is \$100,000.

Rush—Zinc Mines.—Buffalo River Zinc Mining Co. of St. Louis, Mo., has filed copy of incorporation papers, stating its purpose to develop zinc mines in North Arkansas. John H. Dickerson of Rush is agent.

Shoffner Switch—Mercantile.—Incorporated: Shoffner Mercantile Co., capital stock \$71,000; A. E. Shoffner, president; J. W. Ferrell, vice-president; Ed. R. Woodson, secretary.

St. Paul—Lumber Manufacturing.—Chartered: J. H. Phipps Lumber Co. to operate saw-mills, manufacture wagons and other material. It is capitalized at \$50,000; J. H. Phipps, president; W. C. McCoy, vice-president; J. M. Williams, secretary.

Walnut Ridge—Drug Company.—Chartered: Collier Drug Co., capital stock \$5000; M. M. Collier, president; T. J. Sharum, vice-president; M. S. Cooper, secretary.

Widener—Cotton Ginnery.—Chartered: Griggs Township Ginning Co., capital stock \$100,000, to gin cotton, grind corn and feedstuff, etc.; James McCutchen, president; W. E. Williams, secretary.

FLORIDA.

Bartow—Timber Lands.—W. H. Mattox of Bartow and Fred R. McConnell of Russell, Fla., have purchased 200,000 acres of timber lands in Polk and Osceola counties.

Jacksonville—Lumber Plant.—Incorporated: Atlantic Manufacturing Co., with capital of \$10,000, to deal in timber lands and manufacture products of wood. C. Lyman Spencer, Arthur E. Brown and George A. Carroll are the incorporators.

Jacksonville—Naval Stores, etc.—Chartered: Southern Timber & Naval Stores Co., capitalized at \$400,000, to cut timber, manufacture naval stores, etc. Neill G. Wade is president; Pembroke Jones, vice-president, and Perry M. Colson, secretary.

St. Augustine—Reservoir.—City will build reservoir of 1,000,000 gallons capacity, costing about \$1000, in connection with water-works improvements. Address "The Mayor."

Tallahassee—Timber Lands.—Blasingame & Morgan Lumber Co. of Moultrie, Ga., and Thomasville, Ga., has purchased 27,000 acres of timber land near Tallahassee.

Wakulla—Oil Wells.—Florida Oil & Mining Co., incorporated in Dakota with \$1,000,000 capital stock, will drill for oil in Wakulla county. J. D. Bush of New York is president.

GEORGIA.

Americus—Fertilizer Factory.—It is reported that Armour & Co. of Chicago, Ill., will build fertilizer plant, about \$150,000 to be invested.

Arnold—Saw-mill.—Ward Lumber Co. has begun erection of saw-mill.

Atlanta—Electric Plant.—Chartered: Central Light & Power Co., by Mell R. Wilkinson, James R. Gordon, S. E. Smith, Fred A. Miles and Thomas L. Hughes, to establish electric-lighting, heating and power plants at different towns in the State. Capitalization is \$100,000.

Atlanta—Flooring Plant.—L. P. De Groot Manufacturing Co., reported incorporated recently with \$5000 capital, will not manufacture fire screens, as was stated. It will manufacture parquet, hardwood floors, borders, etc., and will lay and finish throughout the United States. Plant is now being established; offices, 314 Prudential Building.

Gainesville—Cotton Mill.—Gainesville Cotton Mills has decided upon the proposed increase of capital, recently noted, from \$500,000 to \$850,000. The \$350,000 will be expended on erection of an additional mill. Company now has 25,200 spindles and 710 looms.

Thomasville—Planing Mill.—C. W. Kirby of Shelby, Ga., and Wm. McKay of Macon have formed Kirby Planing Mill Co., capitalized at \$15,000, and will build plant.

Valdosta—Commission, etc.—Incorporated: Southern Product Co., capitalized at \$10,000, by W. D. Peoples, S. M. Varnedoe, E. Y. Fry and others.

Villa Rica—Electric-light Plant.—Villa Rica Light & Power Co. will be incorporated, with capital stock of \$10,000, to build electric-light and power plant.

KENTUCKY.

Barlow City—Flour Mill.—L. H. Heffer & Sons of Lowes, Ky., will build mill for daily production of seventy-five barrels of flour.

Chenault—Gold Mines.—C. L. Fleck of Chicago, Ill., and C. B. Wight of Racine, Wis., have organized Flint Island Gold Mining Co. to develop gold-bearing properties near Chenault.

Danville—Electric-light Plant.—City contemplates issuing bonds for the construction of an electric-light plant. Address "The Mayor."

Farmers—Freestone Quarries.—Rowan County Freestone Co. has begun the development of freestone quarries.

Louisville—Abattoir and Packery.—Louisville Abattoir Co. will be incorporated to build abattoir and packing-house to cost over \$300,000. Chicago architects are now preparing the plans. Henry Rauh of Indianapolis, Ind., will be president, and Ira F. Brainard of Pittsburg, Pa., will be a director.

Mayking—Lumber Plants, etc.—D. B. Wentz and Patrick Hogan of Southwestern Virginia have purchased 5000 acres of coal and timber lands in Knox county. They will build saw and stave mills, and may open coal mines.

Melber—Flour Mill.—William Fry will install additional machinery in his flour mill.

Russellville—Asphalt Mines.—American Standard Asphalt Co. has arranged for \$50,000 additional capital in order to extend the developments of its asphalt properties.

LOUISIANA.

Barataria—Rice Plantation.—Barataria Land & Rice Co. has been organized, with capital stock of \$300,000, purchased and will enlarge operations at Berthoud plantation. Paul Jones of Columbus, Miss., is president; Howard C. Black of Plain City, Ohio, secretary, and Uri Hilliard, Jr., of Hilliard, La., general manager.

Cut-Off—Irrigation Systems.—Golden Meadows Developing Co., Ltd., has been organized, with capital stock of \$350,000, to construct irrigation systems for the reclama-

tion and development of swamp lands near Cut-Off. W. H. Junk of Dixon, Ill., is president; John M. Dresser of New Orleans is vice-president. Other New Orleans and Dixon capitalists are interested.

New Orleans—Druggists.—Parker-Blake Company, Ltd., has been incorporated, with capital stock of \$250,000; Arthur D. Parker, president, and Percy H. Brown, secretary.

New Orleans—Plantation.—Chartered: Old Plantation Co., Ltd., capitalized at \$600,000, to operate plantations, etc.; Daniel McNabb, president; E. Gervais, secretary, and J. E. Hartenbower, treasurer.

New Orleans—Commission.—Chartered: J. W. Hastings Co., Ltd., with capital stock of \$3000. J. W. Hastings is president, and John A. Grehan, secretary.

New Orleans—Enameling Plant.—National Enameling & Stamping Co. (main offices in New York) will build branch plant to cost about \$250,000; John J. Mapp, Orange and Constance streets, resident agent.

New Orleans—Cold-storage Plant.—New Orleans Cold Storage Co. will increase capital stock from \$125,000 to \$250,000 and double its plant.

MARYLAND.

Baltimore—Farming Lands.—W. Bernard Duke, Henry W. Rowland, Benjamin H. Duke and others have incorporated Maryland Development Co., with capital stock of \$10,000, to develop farming lands.

Baltimore—Pharmaceutical.—Incorporated: Grape Fruit Tablet Co., for manufacturing pharmaceutical specialties, by Wallace P. Whitmore, Benjamin C. Bayne, John Stone-wall J. Healy, Michael A. McCormick, William T. Hanzsche and Edward Hanzsche, with a capital stock of \$10,000.

Bloomington—Coal Mines, etc.—Chartered: J. C. Brydon Bros. Co., to mine coal, quarry stone and market same; capital stock \$100,000; incorporators, J. C. Brydon, Somerset, Pa.; W. A. Brydon and S. B. Brydon, Bloomington, Md.; W. S. Brydon, Philippi, W. Va., and L. B. Brydon, Simpson, W. Va.

Hancock—Cement Works.—New York parties contemplate building cement works two miles from Hancock. It is said that J. Frank Fields represents the projectors.

Washington, D. C.—Industrial, etc.—Chartered: United States Industrial & Realty Co., capital stock \$1,000,000, by James A. Black, Abner E. Anson and Virgil M. Fookes, Washington; George H. Opdyke, Thomas Hassett and Mortimer E. Joiner, New York.

Washington, D. C.—Medicine Factory.—Incorporated: Search Chemical Co., capital stock \$200,000, for the manufacture of patent medicines. The incorporators are N. C. Search, F. C. Philbrick, T. R. Matthews, each of Baltimore, Md.; D. S. Fletcher, N. A. Smith, K. M. Fletcher, E. J. Dinmick, each of Washington. Office at 34 Ward Building.

Washington, D. C.—Real Estate.—Engene C. Robinson, Ernest L. Squire and John C. Rogan have incorporated New York and London Syndicate to deal in real estate.

Washington, D. C.—Leather Manufacturing.—Chartered: Newark Chrome Leather Co., capital stock \$100,000, by Leopold Graf, Ernest L. Squire and Thomas McGrath, to manufacture leather. Office at 210 7th street S. W.

MISSISSIPPI.

Bay St. Louis—Telephone System.—John J. Herlihy, W. H. Frazier and W. T. Daly have incorporated Bay Telephone Co., with capital stock of \$1000, to establish telephone system.

Centerville—Water-works.—City has accepted plans and specifications by C. H. Jenks of Fayette, Miss., for construction of its proposed water-works. Bids on the construction are now being invited. Address "The Mayor."

Jackson—Lumber Plant, etc.—Empire Lumber & Manufacturing Co. will continue operation of plant referred to last week. It will enlarge mill as demand requires. An electric-light plant will be installed soon; A. Hamilton, manager.

Palmetto Home—Lumber Plant.—Holly Mound Lumber Co., recently reported incorporated under Yazoo City with \$3000 capital, is building mill at Palmetto Home. W. B. Thomason is president.

Rosedale—Saw-mills.—George L. Kerg of Rosedale and Will H. Hopkins of Chicago have organized Kerg-Hopkins Company, with capital of \$10,000, and will build several saw-mills.

Vicksburg — Gas Plant. — Incorporated: Vicksburg Gas Co., capital stock \$134,000, by G. S. Butts, E. C. Carroll and C. C. Flowerree.

MISSOURI.

Brice—Flour Mill.—Atchly Bros. will enlarge their flour mill and install additional machinery.

Campbell—Lumber Plant.—Garretson-Grease Company of St. Louis has purchased Campbell Lumber Co. and timber interests said to contain 55,000,000 feet of timber. An additional double-band mill will be built.

Chillicothe — Foundry, etc.—Chartered: Frank Way Foundry & Machinery Co., capital \$50,000, by Frank Way, R. L. Isherwood and J. W. Dienst.

Hume—Mining.—Chartered: Hume Mining Co., capital \$330, for mining and prospecting. The directors are F. N. Lightner, E. N. Chastain, C. E. Horton, W. C. Foster, I. A. Petty, O. T. Holland, J. Gasaway. E. N. Chastain is president. F. P. Covert, Yellville, Ark., is agent for Arkansas.

Jefferson City—Gravel and Sand.—Chartered: Jefferson City Sand & Gravel Co., capital \$500, by Peren Kay, Fred Kay, Lon V. Stephens and others.

Joplin—Coal Mines.—Incorporated: R. L. Fink Coal Co., capital \$10,000, by R. L. Fink, Cora Fink and Thomas J. Roney.

Kansas City—Supplies.—Chartered: Stinson Supply Co., capital \$22,000, by E. R. Stinson, B. E. Stinson and J. W. Arrasmith.

Kansas City—Transfer Company.—Incorporated: Century Transfer Co. & Freight Bureau, capital \$10,000, by P. J. Tapp, John N. Penrod, James A. McNulty and others.

Kansas City—Bridge Company.—Chartered: Kansas City & Clay County Tool Bridge Co., capital \$2000, by James Lynn, Charles P. A. Gibson and others.

Kansas City—Grain.—Chartered: Kansas City Seed & Grain Co., capital \$2000, by J. I. Reynolds, A. J. Poor, J. E. Reynolds and Forset Poor.

Kansas City—Industrial.—Industrial Operating Co., capitalized at \$250,000, has been incorporated by Arthur L. Huston, Fifteenth street and Prospect avenue, and others.

St. Joseph—Brick and Tile Works.—Chartered: Missouri Brick & Tile Co., to develop extensive shale beds, by Theodore Benkenhoff and J. H. Parker of Colorado Springs, Col., and others; capital stock \$20,000.

St. Louis—Smelting Plant.—Ore Reduction & Smelting Co., reported last week with \$50,000 capital, will build smelting plant. E. E. Squier, secretary, is in charge; offices at 38 Equitable Building.

St. Louis—Manufacturing.—Chartered: A. Kuenzel Manufacturing Co., with capital of \$500, by Andrew Kuenzel, Ernst Kuehn and Louise Kuenzel.

St. Louis — Manufacturing.—Chartered: Peter Manufacturing Co., capital \$100,000, by George W. Peter, Richard Walker and Reuben Adeox.

St. Louis—Electric Appliances.—Incorporated: Pan-Electric Service & Appliance Co., with paid-up capital of \$7000, by H. S. Graber, P. J. Chandeysson, W. H. Schweder, D. F. Babcock and C. L. Walt.

St. Louis—Steam-heating Company.—Chartered: National Vacuum Steam Heating Co., with paid-up capital of \$50,000, by James R. Wade, Festus J. Wade, John S. Sullivan, James Campbell and C. H. Spencer.

St. Louis—Cork Company.—Incorporated: J. R. Smith Cork Co., capital \$20,000, by Lelia Smith, William J. Smith, Lelia E. Smith and Ida M. Smith.

St. Louis—Shoe Factory.—Roberts, Johnson & Band Shoe Co. will build plant for manufacturing 8000 pairs of shoes daily. Building will be 375x273 feet. Theodore C. Link is preparing plans and specifications. Building and machinery will cost about \$100,000.

St. Louis—Adding Machine Works.—Chartered: Addograph Manufacturing Co., with a capital of \$50,000, by Hubert Hopkins, Simon Lederer, James L. Dalton and William W. Hopkins, to manufacture adding machines.

NORTH CAROLINA.

Chadbourn—Telephone System.—Columbus Telephone Co. contemplates extending its lines to Wilmington.

East Durham—Cotton Mill.—Durham Cotton Manufacturing Co. will install additional looms.

Elizabeth City — Electric-light and Gas Plants, Water-works, etc.—The Electric Light Co. of Elizabeth City will install complete water-works, sewerage system, gas plant for light and fuel, and remodel present electric-light plant. H. C. Tunis is active engineer in charge. D. B. Banks of Balti-

more, Md., is advisory engineer. No contracts have been awarded.*

Elizabeth City—Mercantile.—Incorporated: Aydtlett Bros. Co., with capital stock of \$51,200, by D. F. Gallup, W. E. Evans, J. H. Aydtlett, A. Aydtlett, C. H. Robinson and E. F. Aydtlett.

Hamlet — Electric-light Plant.—Incorporated: Hamlet Electric Light Co., capital \$100,000, to establish electric-light plant, by George O. Sanders, F. C. Allen and Norman G. Stewart.

Haw River—Flour Mill.—J. Thompson & Son will remodel their flour mill to the roller system.

Lumberton — Electric-light Plant.—Plans are on foot for the establishment of an electric-light plant. Robert E. Lee can give information.

Mt. Airy—Ice Plant.—R. T. Joyce will establish five-ton ice plant.

Mt. Airy—Water-works.—Town will vote in January on issuance of \$50,000 of bonds for construction of water-works. Address "The Mayor."

Mt. Airy—Mercantile.—Chartered: West-Hill Company, capital \$10,000, by J. M. Hill, A. V. West and J. E. Hill.

Oxford—Cannery.—White Canning Co., reported incorporated last week with \$50,000 capital, will build complete plant of 5000 cans capacity.*

Rockingham — Cotton Mill.—Great Falls Manufacturing Co., noted last week as increasing capital \$50,000, will add 3500 spindles. Contract has been let.

Spray—Textile Mill, etc.—Incorporated: The Imperial Company, capitalized at \$60,000, for manufacturing textiles, mercantile purposes, etc., by Thomas G. McAllister of Fitzgerald, N. C.; B. K. Terry of Spray and J. Worth McAllister of Charlotte.

Wilson — Tobacco Factory.—Wells-Whitehead Tobacco Co. contemplates enlarging its plant and introducing a new product.

SOUTH CAROLINA.

Anderson—Cotton Mill.—Anderson Cotton Mills will change its machinery to finer production, and reports state that 7500 spindles will be added.

Beaufort—Rice Plantation.—Chartered: Tomatly Plantation, capital \$50,000, by Walter M. and Geo. T. Jackson, to cultivate rice.

Carlisle — Knitting Mill.—Chartered: Carlisle Knitting Mill, capital stock \$30,000, by D. F. Gilliam, John A. Fant, J. S. Welch, J. D. Smith and Wm. H. Gist, to establish plant lately reported; D. Fant Gilliam of Union, S. C., president.

Charleston—Rice Mill.—Edw. A. Daugherty, 31 Marine Bank Building, Baltimore, Md., proposes organizing company to build \$50,000 rice mill, daily capacity of 500 barrels, in the South. He proposes using a patented machine for removing cuticle and eye from rice without breaking grain. Charleston is being considered as location, but some town in Louisiana or Texas may be selected.*

Columbia—Steam-valve Works.—Chartered: Brooks Improved Steam Valve Co., to manufacture a recently-invented steam valve, by U. R. Brooks, James B. Edwards, S. F. Carter and W. L. Bennett; capital \$1200.

Columbia—Steam Laundry.—Incorporated: Sun Steam Laundry, by J. D. Miot, Jas. A. Hoyt, Jr., and Charles M. Galloway, with capital stock of \$2500. The incorporators have bought Snow Steam Laundry on Gervais street.

Fort Motte—Oil Mill.—Fort Motte Cotton Oil Mill has been incorporated, with R. E. Wannamaker of Stilton, S. C., president; A. R. Taber, Sr., vice-president, and W. G. Peterkin, manager.

Marion—Light and Water Company.—Incorporated: Marion Water, Light & Power Co., capital stock \$100,000, by Arthur Dunn and A. N. Walker of Scranton, Pa., and Hyman Witcover and J. W. Johnson of Marion.

Munsey—Cotton Mill.—Davis Cotton Mills has been incorporated, with capital stock of \$250,000, and will build plant. W. B. Smith Whaley & Co. of Columbia, S. C., are architects in charge. Chas. Warren Davis, No. 2 Leonard Building, Augusta, Ga., is president. (This enterprise was projected previously, but final arrangements were delayed.)

Ridgeway—Gold Mining.—Dr. Murray of the Murray Drug Co. of Columbia, S. C., is reported as to reopen the Lamar gold mine.

Saluda—Cotton Mill.—It is reported that North and South Carolina and Northern capitalists have bought Green River Shoals, and will develop water-power; also erect a cotton mill.

Union — Mercantile.—Chartered: R. W. Scott Company, capital stock \$5000, by R. W. Scott, J. L. McWhirter and J. B. Askins.

TENNESSEE.

Brownsville — Electric-light Plant.—Burt Smith Company has bought Brownsville Electric Light Co. and plant. The plant will be improved.

Chattanooga—Drug Company.—Chartered: Chattanooga Drug Co., by C. H. Holland, William C. Ebert, William T. Murray, G. W. Davenport, John S. Martin and T. B. Murray.

Chattanooga — Medicine Factory.—L. H. Gerstle, Sam S. Gerstle, S. M. Chambliss and J. P. Pemberton have incorporated Gerstle Medicine Co., with capital stock of \$100,000, to succeed L. Gerstle & Co., manufacturers of medicines.

Chattanooga—Electric-light Plant.—Chattanooga Light & Power Co. will expend about \$200,000 to enlarge and improve its plant.

Chattanooga—Cedar Works.—Gurney Manufacturing Co. of Roane Mountain, Tenn., has bought Von Hardmuth Cedar Works, mentioned last week. It will enlarge and improve the plant and install equipment of machinery for manufacturing all kinds of power-transmission machinery, etc.

Chattanooga—Foundry.—Chartered: Price-Evans Foundry Co., by Jonathan E. Price, Mrs. Martha Evans, Miss Martha Evans, Chester D. Richmond and Theodore Richmond. The capital stock is \$40,000. Company acquires an established plant.

Franklin—Mercantile.—Incorporated: Talley & Cleatlin Mercantile Co., with \$15,000 capital stock, by Eli Cleatlin, E. C. Cleatlin, M. B. Talley, H. B. Talley and H. M. Templeton.

Isoline—Coal Mines.—Pennsylvania capitalists are investigating their coal properties near Isoline with a view to developing mines. W. M. Dunn of Pennsylvania has been at Isoline and Crossville lately investigating for the principals.

Knoxville — Clothing Factory.—Incorporated: Standard Clothing Co., with a capital stock of \$10,000, by C. A. Snodgrass, W. D. Williams, John R. Williams, George C. Williams and John W. Green, to manufacture clothing.

Lawrenceburg—Electric-light and Water Works.—City has received estimate from Granbury Jackson of Nashville for its proposed water-works and electric-light plant. Cost is estimated at \$23,000. An election will be called to vote on issuing bonds. Address "The Mayor."

Lewisburg—Electric-light Plant.—City has voted issuance of \$5000 bonds for erecting electric-light plant. Address "The Mayor."

Lynville—Electric-light Plant.—Town contemplates installation of electric-light plant. Address "The Mayor."

Manchester—Flour Mill.—W. A. Jacobs will build mill for daily output of fifty barrels of flour.

Memphis—Car Works.—It is stated that Southern Car & Foundry Co. will expend \$50,000 to enlarge and double its car works. J. M. Hanson of Pittsburg, Pa., is president. General offices at Birmingham, Ala.

Memphis—Railroad Shops.—St. Louis & San Francisco Railroad has purchased fourteen acres of land at \$14,000, and it is rumored the property will be used as site for the establishment of \$150,000 machine and car shops. B. L. Winchell of St. Louis, Mo., is general manager.

Memphis — Stoneware Plant.—Memphis Stoneware Co., reported incorporated last week with \$50,000 capital, has completed erection and equipment of plant. Isaac Reese is president.

Memphis—Wagon Plant.—Hickman (Ky.) Wagon Co. states there is no truth in the report, mentioned last week, that it will remove its plant to Memphis.

Nashville—Telephone Systems.—Cumberland Telephone & Telegraph Co. will meet December 29 to consider increasing capital stock from \$10,000,000 to \$20,000,000.

Newbern — Supplies.—Incorporated: Newbern Supply Co., capital stock \$7500, by W. F. Milan, J. S. Chapman, L. B. Spencer, R. M. Jones and J. V. Hardy.

Shelbyville—Flour Mill.—E. E. Hall will rebuild burned flour mill.

Shelbyville — Pencil Mill.—Incorporated: Dixie Red Cedar Co., by W. A. Frost, J. D. Hutton, H. L. Woosley, W. C. Evans and Thomas N. Greer. It is capitalized at \$5000, and will build slate and pencil mill.

Springfield — Electric-light and Water Plants.—City has let contract to Union Machine Works of Nashville for construction of electric-light plant to cost \$11,000. Contract for construction of water-works has also been let. Address "The Mayor."

Tullahoma—Soap Factory.—E. F. Wheeler has established a soap factory.

TEXAS.

Amarillo — Mercantile.—Chartered: White & Kirk Mercantile Co., capitalized at \$40,000, by E. W. White, R. D. Kirk, Sam Hand and others.

Austin—Gas Company.—Incorporated: Germicde Gas Co., capital stock \$30,000, by J. M. Hous, L. W. Coock and J. M. Shumate.

Beaumont—Oil Wells.—Incorporated: Cypress Oil Co., capital stock \$1,000,000, by Frank R. Grover, A. M. Shellito of Evanston, Ill.; C. E. Purdy of Independence, Iowa; F. M. Isom of Dunkerton, Iowa; P. C. Dings of Laporte City, Iowa; Fred W. Browne of Oak Park, Ill., and M. Holcroft of Cincinnati, Ohio, to drill for oil.

Beaumont—Brewery.—It is reported Pabst Brewing Co. of Milwaukee, Wis., will build \$250,000 brewery and ice plant; J. R. Drindell, local manager.

Dallas—Municipal Construction Company.—Incorporated: General Municipality Construction Co., capital stock \$50,000, to construct dams, reservoirs, lakes and irrigation canals, also to maintain city water-works; incorporators, J. C. Weaver, C. H. Briggs, W. B. Rittenberry, T. C. Harry and M. Griffin O'Neil.

El Paso—Mercantile.—Incorporated: Fair Company, capital stock \$60,000, by Charles E. Kircher, Jr., John M. Cannon, A. Schwartz, S. J. Freudenthal and H. B. Hamilton.

Fort Worth—Live-stock.—Chartered: Panhandle Live-Stock Commission Co., capitalized at \$30,000, by John W. Holman, John A. Gant, W. M. Holman and others.

Fort Worth—Starch Factory.—J. S. Wells of Cortland, N. Y., and Nicholas Gaither of Hopkinsville, Ky., have formed Queen Quality Starch Co. and established factory of fifty cases daily capacity; offices on South Main street.

Geraldlne—Oil Wells.—Chartered: Geraldine Oil Co., capital stock \$50,000, by R. M. Miller, H. O'Ham, Charles Schuber, F. D. Kerns and J. F. Winchester, to drill for oil.

Houston—Rice Mills.—Chartered: Matagorda Rice Mills of Houston, capital stock \$50,000, to construct rice mills in Matagorda county; incorporators, C. W. Robinson, Bernard Brown, J. L. McCarty and H. W. Cortes.

Kaufman — Electric-light Plant.—Incorporated: Kaufman Electric Light Co. of Kaufman, capital stock \$25,000, by M. A. Joy, S. E. Noble and W. S. Catlin.

Lane City—Mercantile.—Chartered: Lane City Mercantile Co., capital stock \$30,000, by E. A. Arnim of Flatonia, Texas; W. K. Morrow and J. Lane of Houston.

Sherman—Grocery.—Incorporated: Gordon Griffin Grocery Co., capital stock \$10,000, by H. F. Griffin, C. J. Hayden, J. E. Cappleman, D. P. Austin and O. H. Hayden.

Sour Lake—Oil Refinery.—Oscar Railer and Joseph Graff of St. Louis, Mo., have purchased site for erection of oil refinery.

Terrell—Electric-light Plant.—Incorporated: Terrell Electric Light Co., capital stock \$25,000, by M. A. Joy, S. E. Noble and M. W. Raby.

Tehuacana—Drug Company.—Incorporated: Tonkawa Drug Co., capital stock \$10,000, by R. M. Love, Austin; J. G. Hamill, Beaumont; Cyrus Baldrige, Kansas City; J. W. Pearson, Tehuacana, and A. L. Collins, Tehuacana.

Terrell—Grain Company.—Chartered: Terrell Grain & Mercantile Co., capital stock \$25,000, by M. A. Joy, M. J. Kavanaugh and T. A. Kavanaugh.

Texarkana — Improvements.—Chartered: Texarkana Improvement Co., capital stock \$10,000, by E. J. Spencer of St. Louis, Mo.; M. C. Wade and R. W. Rodgers of Texarkana.

Waxahachie—Ice Plant.—Waxahachie Ice Co. will enlarge and improve its plant, including erection of brick building to replace present frame structure.

VIRGINIA.

Charlottesville—Street Improvements.—City has voted an appropriation of \$50,000 for street improvements. Address "The Mayor."

Cross Roads—Flour Mill.—J. J. Blackstock will remodel his flour mill to roller system.

Front Royal—Copper Mines.—Carter Copper Co. proposes to install modern plant for thorough development of its 700 acres of copper-bearing lands in Fauquier county. Plant will include steam air compressor, three air drills, two hoisting engines, 75-horse-power crusher, 50-ton blast furnace, concentrating table, etc., to handle fifty tons of ore daily and convert same into copper matte. Specifications for the machinery have not been prepared as yet. H. R. Crook at Front Royal is engineer in charge. H. Lee Carter is president; John S. Wise, vice-president, and

William Lawrence Clark, secretary, all of New York; offices at 25 Broad street.

Iron Gate—Coke Ovens.—Alleghany Ore & Iron Co. of Clifton Forge, Va., is rumored as to build 200 coke ovens.

Laurenceville—Furniture Factory.—Laurenceville Manufacturing Co. will be organized, with capital stock of \$50,000, to build furniture factory. E. F. Hicks, until recently of Cincinnati, Ohio, is manager. H. C. Hixson will be secretary. Manager can be addressed care Monticello Hotel, Norfolk.

Newport News—Grate and Mantel Works.—W. G. Melvin and W. R. Temple have organized Southern Mantel & Grate Manufacturing Co., and will establish plant. Machinery has been secured.

Newport News—Silk Mill.—Liberty Silk Co., 546 West Fifty-seventh street, New York, will build the silk mill mentioned last week. Over \$100,000 will be expended.

Pamplin City—Flour Mill.—E. F. Williams and J. F. Connelly will build flour mill of eighty barrels capacity daily.

Portsmouth—Electric Light Plant.—City will examine into the advisability of building an electric light plant. Portsmouth Gas Co. now lights the city. Address "The Mayor."

Portsmouth—Dairy.—Riverview Dairy will be incorporated, with capital stock of \$75,000, to acquire and extend an established dairy farm; Joseph Grice, president; T. E. Trotman, vice-president, and F. Nash Billsoly, secretary.

Scottsville—Overalls Factory.—Acme Overalls & Manufacturing Co. has been incorporated, with capital stock of \$10,000, to enlarge and continue an established overalls factory. F. F. White is president; A. B. Butt, secretary, and H. R. Townsend, manager.

Staunton—Cotton Mill.—It is rumored that C. B. Somerville proposes organizing company to build cotton mill.

Watkins—Grist Mill.—Wm. R. Taylor will build grist mill of 700 bushels capacity daily.

Wytheville—Iron Mines.—Captain McKee proposes organizing \$250,000 stock company to buy iron-ore lands at \$100,000 and develop the properties.

WEST VIRGINIA.

Blaine—Coal Mines.—Stevenson Coal Co. has been organized to develop coal mines. W. P. Stevenson of McVeytown, Pa., is president, and John K. Wimbrough of Baltimore, Md., manager.

Bramwell—Coal Mining.—Chartered: Galmier Mining Co., to conduct a general coal, iron, lead, zinc, gold and silver mining business; capital \$100,000; incorporators, W. M. Ritter, James L. Hamill, C. W. Seaman, R. E. Pendleton and A. R. Pryor, Columbus, Ohio.

Brewster—Coal Mines.—Berwin-White Coal & Coke Co. of Windber, Pa., is having surveys and tests made of coal lands near Brewster with a view of opening mines and erecting coke ovens. It has 20,000 acres of lands.

Brewster—Coal Mines.—Faraday Coal & Coke Co. of Pittsburgh, Pa., is making surveys and tests of coal lands near Brewster with a view of opening mines and building coke ovens. It has 30,000 acres of lands.

Burnsville—Flour Mill.—T. D. Jackson will build mill for daily production of fifty barrels of flour.

Cameron—Electric Light Plant.—G. S. Emsheimer of Wheeling, W. Va., has applied for franchise to build electric light plant. He will organize Cameron Electric Light, Heat & Power Co., to own and operate the plant.

Charleston—Coal Mines.—Chartered: United Collieries Co., to conduct a general coal-mining business; capital \$25,000; incorporators, S. P. Richmond, John C. Malone, L. C. Oney, Fred Moore and E. W. Knight.

Clarksburg—Architects and Builders.—Chartered: West Virginia Architects & Builders, capitalized at \$25,000, by George E. Connell, Chas. W. McNulty, William H. Pierson and others.

Clarksburg—Improvement Company.—Incorporated: Clarksburg Improvement Co., with a capital stock of \$25,000, by J. F. Allen, S. C. Allen, R. J. Allen, A. C. Allen and Richard Scott.

Cranesville—Mercantile.—Chartered: Cranestown Mercantile Co., capital \$10,000, by E. G. Albright, K. E. Burke, C. W. Cramer, E. F. Jenkins, H. W. Ringer, M. W. Sanders and C. G. Teets.

Elkins—Lumber Plant.—Bell & Morrison have purchased timber lands at about \$30,000, and it is reported will build a large lumber plant.

Elkins—Timber Lands.—R. R. Rumbarger and Frank Rumbarger have purchased the timber on an extensive tract of land, and

are reported as to build lumber mills for development. It is reported that 100,000,000 feet of lumber can be cut on the tract.

Glenville—Lumber Company.—Incorporated: Glenville Boom & Lumber Co., capital \$50,000, by J. S. Withers, Linn Brannon, W. J. Holben and S. A. Hays, Glenville, and C. E. Van Decander, Parkersburg.

Hinton—Coal Mines.—Chartered: Summers Colliery Co., with capital stock of \$100,000, to open coal mines. Incorporators are H. H. Morris, J. H. Jordan, H. Ewart, William Plumley, Jr., O. B. Mahan, W. L. Fredeking, R. R. Flannagan, Robert Beals and James H. Miller.

Lumberport—Development Company.—Incorporated: Lumberport Building & Development Co., with capital stock of \$25,000, by V. L. Harnor, Lee Bogges, I. E. Bogges, L. C. Oyster, C. S. Harnor, F. M. Robinson, R. Y. Fortney and Griffin & Seirger.

Mannington—Boiler Works.—West Virginia Machine & Boiler Co. will rebuild its plant recently burned.

Morgantown—Tinplate Plant.—Morgantown Tinplate Co. has been organized, with capital stock of \$150,000, to build plant.

Morgantown—Coal Mines.—It is reported that Baltimore capitalists, represented by John B. Scott of Baltimore, Md., have purchased for development the mining privileges on 12,000 acres of coal lands near Morgantown.

Parkersburg—Mercantile.—Chartered: C. Nelly Company, with capital stock of \$100,000, by Christian Neely, C. M. Neely, John S. Woofter, William Kramer and F. C. Cramer.

Salem—Contracting Company.—Incorporated: Miner Contracting Co., with capital stock of \$40,000, by G. R. Miner and G. L. McKain of Salem, C. E. Joffe of Mannington, L. M. Marton of Parkersburg and W. F. Falser of Marietta, Ohio; purpose is to construct, maintain and operate water-works, gas-works and electric-light plants, etc.

Wellsburg—Coal Mines.—Wellsburg Coal Co., mentioned recently, will build plant for mining 2000 tons of coal daily, operations to begin next May. Electrical machinery will probably be used. No contracts have been let. W. G. Wilkins, Westinghouse Building, Pittsburg, Pa., is engineer in charge.

Wheeling—Car-wheel Works.—Board of Trade has closed contract securing the establishment of car-wheel works.

Willow Bend—Flour Mill.—Joseph Loudenmilk will build flour mill of thirty barrels capacity daily.

Wright—Coal Mines.—Chartered: Erskine Coal & Land Co., for coal mining, capital stock \$1,000,000, by Alfred Joffe, John Strett, W. B. Wilson, E. E. Edmondson and Fitzhugh Elder, all of Staunton, Va.

INDIAN TERRITORY.

Muscogee—Cotton Compress.—F. P. Cooper & Co. of Brownwood, Texas, will build cotton compress. Contract for erection has been signed.

OKLAHOMA TERRITORY.

Alva—Flour Mill.—Alva Roller Mills Co. has increased capital stock from \$25,000 to \$50,000.

Alva—Industrial.—Chartered: Woods County Industrial Co., with \$10,000 capital, by J. W. Monfort, J. D. Shure, A. J. Ross and George Carter.

Chattanooga—Town Company.—Incorporated: Chattanooga Town Co., with \$16,000 capital, by N. E. Sisson of Chattanooga and F. E. Riekey and C. O. Blackie of El Reno, O. T.

Lawton—Sewerage System.—City has accepted plans by W. S. Shields, 1715 Marquette Building, Chicago, for construction of its proposed sewerage system. Bids will be opened next month, and estimates are solicited. For information address "City Clerk."

Leger—Electric Light and Telephone Franchise.—Application has been made to city for electric light plant and telephone system franchises. Address "The Mayor."

Mt. Sheridan—Gold Mining.—Chartered: Blue Creek Gold Mining Co., with \$25,000 capital, by J. J. Barlow, Herbert Hodge, H. G. Thurmond and R. C. Baker, all of Meers, O. T.

Norman—Electric Plant.—Norman Lighting Co., recently reported incorporated with \$15,000 capital, will build electric-light plant. Samuel Perrott, Newton Claypool Building, Indianapolis, Ind., is engineer in charge. No contract has been let. Address Henry C. Ulen, Jr., Newton Claypool Building, Indianapolis, Ind.

Oklahoma City—Ice Cream Factory.—Steffen-Kretsch Ice & Ice Cream Co., for manufacturing purposes, has been incorporated by N. Steffen, W. H. Kretsch and S. S. Noble of

Wichita, Kan.; C. M. Beachey of Newton, Kan., and D. F. Soliday of Oklahoma City. Capital stock is \$100,000.

Oklahoma City—Lumber Company.—Incorporated: Ozark Lumber Co., with \$50,000 capital stock, by W. H. and S. J. Roth of Oklahoma City, and A. A. Rogers of Muskogee, I. T.

Oklahoma City—Publishing.—Chartered: Oklahoma Realty & Publishing Co., with \$2000 capital, by M. S. Perkins, J. B. Novak, O. J. Metcalf and S. E. Witousek.

Stout—Telephone Company.—Incorporated: Stout Rural Telephone Co., with \$10,000 capital stock, by W. B., S. M. and George Auxier and W. A. Verdier.

Weatherford—Mining.—Chartered: Great Bismarck Mining Co., with \$1,000,000 capital, by Peter Knadoorf, Theo. Scholtes and Nick Sauer.

BUILDING NOTES.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

Albany, Ga.—Courthouse.—Dougherty county will vote on issuance of \$40,000 bonds for construction of courthouse. Address "County Clerk."

Atlanta, Ga.—Apartment-house.—Geo. P. Howard will erect apartment-house 100x200 feet to cost \$300,000, after plans by Collier, Brown & Walker.

Baltimore, Md.—Dwelling.—Albert A. Brager will expend \$50,000 on erection of his dwelling reported last week. Jackson C. Gott is preparing plans.

Baltimore, Md.—Bank Building.—Provident Savings Bank has accepted plans and specification for erection of its proposed central building. Structure to be 62x34 feet, of fire-proof construction, latest banking valuts and fixtures, etc., to cost about \$150,000; York & Sawyer of New York city and Jos. E. Sperry of Baltimore, architects; Elisha H. Perkins, president of bank.

Baltimore, Md.—Warehouse.—E. L. Kaufman & Co. are having plans prepared by E. H. Glidden for erection of warehouse 17x30 feet, five stories high, etc.

Beaumont, Texas.—Hotel.—Chartered: Oaks Hotel Co., capital stock \$80,000, by Alba Heywood, Dewey Heywood and L. A. Carlton.

Belton, S. C.—Bank Building.—Farmers' Bank has let contract to Grandy & Jordan for erection of building of brick, with pressed-brick front.

Brevard, N. C.—Hotel.—Toxaway Company will build hotel, S. W. Foulk being architect in charge. Contract for framing has been let; other work will be done by Fox Company. J. F. Hays is general manager.

Charleston, S. C.—Hotel.—Eastern capitalists contemplate building winter hotel on Isle of Palms. Henry F. Gillig of New York represents the parties.

Charleston, S. C.—Clubhouse.—Commercial Club has let contract to H. T. Zacharias and Louis F. Sloan at \$25,800 for rebuilding its home building.

Charleston, S. C.—Wharf.—Bureau of Yards and Docks, Washington, D. C., will open bids January 17 for constructing pile and timber wharf, with appurtenances, at Navy-Yard. Estimated cost \$32,000. Plans and specifications on view at office of bureau, or will be furnished by commandant of Charleston Navy-Yard on deposit of \$10 to secure return.

Clarksdale, Miss.—Barn.—Guyton & Harrington Mule Co. will build barn to cost about \$9000.

Clarksburg, W. Va.—Church.—M. E. Church contemplates building \$15,000 church edifice. S. M. Hill, T. S. Wade and M. M. Carr will secure the plans and specifications.

Clarksburg, W. Va.—Store Building.—J. F. Jones will erect business building 75x100 feet, three and five stories high, to cost \$60,000.

Cleburne, Texas.—Bank Building.—M. M. Pittman and associates propose erecting bank building.

Donaldsonville, La.—Opera-house.—A \$25,000 company will be organized to build opera-house, three stories, of brick, iron and plate glass, etc. Board of Trade can give information.

Fayetteville, N. C.—Warehouse.—John H. Culbreth will build warehouse.

Harrisonburg, Va.—Bank Building.—First National Bank will erect office building five stories high, to cost \$50,000.

Henderson, Ky.—Library.—Munde & McGraw have received contract to erect \$19,000 library building.

Lake Providence, La.—Temple.—A. F. and A. O. Masons will erect three-story temple, with stores and offices.

Louisville, Ky.—Office Building.—Owen Tyler contemplates erection of eight-story building for hotel or office structure.

Louisville, Ky.—Office Building.—Owen Sullivan will erect office building.

Louisville, Ky.—Seminary.—Presbyterian Theological Seminary will erect \$45,000 building.

Nashville, Tenn.—Office Building.—Brown & Brown, architects, contemplate erecting 10-story office building to cost \$500,000.

Nashville, Tenn.—Office Building.—It is reported James Palmer will erect office building to cost \$300,000.

New Orleans, La.—School.—Association for Relief of Jewish Widows and Orphans proposes erecting \$40,000 school building, to be equipped for manual training.

Oklahoma City, Texas—Temple.—W. J. Petree and associates propose erecting Masonic temple.

Parkersburg, W. Va.—Mercantile Building.—H. P. and J. W. Dils will erect six-story business building 67x100 feet, to cost \$25,000.

New Orleans—Store Building.—A. Lehmann & Co. will erect business building, twelve stories high, steel construction, etc.

Sistersville, W. Va.—Bank Building.—People's National Bank, recently mentioned, states that its proposed building will be three stories high, of stone and brick, with all modern improvements.

St. Louis, Mo.—Hotel.—Fraternal orders will build hotel of permanent character, to contain 6000 rooms and cost \$600,000. United Improvement Co., Geo. D. Benson, secretary, represents projectors.

Tifton, Ga.—Bank Building.—First National Bank has let contract for erection of office building 25x60 feet, after plans by Lockwood & Bro. of Columbus, Ohio.

Vicksburg, Miss.—Clubhouse.—Rawson & Pannack have prepared plans for clubhouse for Vicksburg Lodge of Elks; structure to be 50x30 feet, two stories high, costing \$15,000.

Vicksburg, Miss.—Hospital.—Rawson & Pannack have prepared plans for four houses for R. Ernst to cost \$13,000.

Warren, Ark.—Courthouse.—Bradley county will open bids January 3 for construction of the courthouse lately reported; building to be two stories high, 77x85 feet, of pressed brick and granite, to cost about \$45,000. Plans are by Frank W. Gibb of Little Rock. Address County Judge W. F. Culbreth and Commissioner W. L. Turner.

Wheeling, W. Va.—Bank Building.—Wheeling Title & Trust Co. contemplates erecting bank building.

RAILROAD CONSTRUCTION.

Railways.

Annapolis, Md.—The Susquehanna & Tide-water Railroad Co. and the Baltimore & Harford Railroad Co. have been consolidated for the purpose of building a railroad from Havre de Grace, Md., to Wrightsville, Pa. The officers are: President, M. Hampton Houseman, Baltimore; vice-president, John S. Bull, Baltimore; secretary, Stephen J. Caldwell, Baltimore; treasurer, Charles R. McConkey, Peach Bottom, Pa.; directors, James H. Harlow, Pittsburgh, Pa.; Charles R. McConkey, Peach Bottom, Pa.; Charles T. Davis, George K. McGaw, Stephen J. Caldwell, John S. Bull and M. Hampton Houseman of Baltimore.

Asheville, N. C.—It is reported that the Southern Railway will improve the Asheville division at a cost of about \$225,000, to be spent for grade reduction, new rails and track ballasting. W. H. Wells is engineer of construction, Washington, D. C.

Baltimore, Md.—Construction on the tide-water extension of the Western Maryland Railroad has begun. The contractors are the Degnon & McLean Co. of New York.

Baton Rouge, La.—Engineers for the Southern Pacific Railroad have made a survey from Lafayette to Baton Rouge, fifty-one miles, passing through the Anse-la-Butte oil fields. E. B. Cushing is engineer in charge, at Houston, Texas.

Beckley, W. Va.—The Deepwater Railway Co. proposes to build twenty miles of line in Raleigh and Wyoming counties, West Virginia. The work for which bids are advertised includes two tunnels. C. P. Howard is engineer in charge.

Birmingham, Ala.—The Birmingham Belt Railroad Co., now controlled by the "Frise" system, is building three miles of track to

rough industries in the vicinity of Boyle's and North Birmingham. H. W. Earick is superintendent.

Blackstone, Va.—Surveys for the Blackstone & Southern Railroad, from Blackstone to McKinney, on the Seaboard Air Line, have been completed, one via Darville and the other via Westboro and Olden Place, twenty miles. W. A. Laird is chief engineer, and Capt. T. M. Harris, president, both at Blackstone.

Bloomfield, Mo.—A survey has been made by G. H. Harding for the St. Louis & Iron Mountain Railroad for a cut-off from Fliske to Zeta. It shows a grade of less than thirteen feet per mile and avoids heavy grades at Dexter, besides saving six and three-quarters miles.

Bloomfield, Mo.—McArthur Bros. of St. Louis have the contract for the St. Louis & Gulf's line from Bloomfield to Campbell, and the Carroll Bros. Construction Co. has the subcontract.

Bolivar, Tenn.—Engineers reported to be for the Illinois Central Railroad are running a second survey southeast through Harde-man county towards Birmingham, Ala. H. U. Wallace is chief engineer, Chicago, Ill.

Charleston, W. Va.—It is reported from Pittsburg, Pa., that control of the Charleston, Clendenin & Sutton Railroad has been sold to ex-Senator Henry G. Davis of Elkins, W. Va., and others, and will be extended forty-five miles to Beverly, W. Va.

City of Mexico, Mex.—It is reported that the Mexican Central Railroad has arranged to build a branch from Gutierrez via Son-hreterre to Durango, about 100 miles. Lewis Kingman is chief engineer at the City of Mexico.

Covington, Va.—The Rhinehart-Dennis Com-pany, with headquarters at Covington, has been formed to undertake part of the contract of constructing seventy-one miles of the Little Kanawha Railroad extension from Sandy Bend to Burnsville, W. Va. The company also has an office at Parkersburg. The officers are W. A. Rhinehart of Covington, president; W. F. Dennis of Richmond, vice-president; E. J. Patton of Newport News, secretary and treasurer. Directors include the officers and J. H. Rhinehart of Covington and A. M. Valz of Staunton, Va. President Rhinehart, who furnishes this information to the Manufacturers' Record, says that the contract will amount to about \$2,600,000, and the other contractors interested in the work are the McArthur Bros. Co., who also have an office at Parkersburg.

Elizabeth City, N. C.—Sanford & Brooks of Baltimore, Md., will, it is reported, soon begin work on the wharves and piers for the Suffolk & Carolina Railway, which is building a 25-mile extension to Elizabeth City.

Elizabethtown, Ky.—Superintendent Coen of the Kentucky Improvement Co. is quoted as saying that a railway will be built from Grayson's Springs Station to Millerstown. Regarding the report that this was an Illinois Central proposition, Chief Engineer H. U. Wallace writes the Manufacturers' Record from Chicago that he knows of no such plan by the company.

Florence, Ala.—It is reported that J. L. Bell of Florence and New York has purchased the roadbed of the Florence Northern Railroad, which is graded for twenty-seven miles northward, and that the construction of the proposed Alabama & Tennessee River Railroad will begin next month.

Fort Worth, Texas.—A. L. Bowers, super-intendent of construction of the International & Great Northern Railroad, is reported as saying that the line between Waco and Fort Worth will hardly be ready for operation by January 1, on account of delays by bad weather. The track is ballasted as far north as Italy, and work is being pushed on the rest of the line.

Fort Worth, Texas.—Construction is being pushed on the Chicago, Rock Island & Pacific's extension from Fort Worth to Dallas. The grade has been completed for five miles and track laid from Fort Worth to the Trinity river.

Galveston, Texas.—It is again reported that the Gulf, Colorado & Santa Fe will build a branch line from Lampasas to San Saba, Texas, about forty miles. C. F. W. Felt is chief engineer at Galveston.

Granger, Texas.—Tracklaying has begun on the Granger, Georgetown, Austin & San Antonio Railway (M., K. & T.), using the old link line recently purchased.

Gulfport, Miss.—It is reported that construction of the Mendenhall & Columbia branch of the Gulf & Ship Island Railroad has begun at Silver Creek. W. W. Vall is chief engineer at Gulfport. Miss.

Guthrie, Okla.—The Kansas City, Mexico & Orient Railway is reported to have let

contract for fifty-six miles of line in Oklahoma. M. P. Paret is chief engineer, at Kansas City, Mo.

Houston, Texas.—Mr. A. V. Kellogg, engineer maintenance of way Houston & Texas Central Railroad, writes the Manufacturers' Record confirming the report that the company has purchased twenty-two acres of land at Hempstead, but will not consider any yard developments until 1904.

Houston, Texas.—The Velasco, Brazos & Northern Railroad will amend its charter to build the proposed extension from Hempstead into Grimes county. E. P. Spears is vice-president and general manager, at Houston.

Jackson, Miss.—A charter has been filed for the Liberty-White Railroad by J. J. White and others of McComb City. It is proposed to build a line from McComb City to Liberty.

Jackson, Miss.—The Natchez & Southern Railway Co., formerly the New Orleans & Northwestern, capital \$5,000,000, has organized. The officers are E. G. Merriam, president; C. B. Brownell, vice president and general manager; L. R. Martin, secretary; C. J. Colton, assistant secretary; F. G. Hudson, treasurer. Its charter authorizes it to build from Natchez to New Orleans. This is a Gould property.

Jennings, La.—George Thompson of New York has been elected president, and William Bradford, secretary and treasurer, of the Columbia Navigation, Irrigation & Land Co., which proposes to build a railroad from Jennings fifteen miles north to connect with its big canal, on which work has begun at Washington, La.

Kansas City, Mo.—Mr. George H. Ross, president of the Union Depot, Bridge & Terminal Railway Co., recently purchased by the Swift and Armour interests, writes the Manufacturers' Record that the company's plans, while not wholly matured, contemplate affording entrance for any road desiring it, and that a bridge is to be constructed for the railroad, but it will also afford facilities for general public traffic and travel of all kinds.

Knoxville, Tenn.—It is reported that the Louisville & Nashville Railroad will build an extension to coal and timber land in Harlan and Knott counties, Kentucky, recently sold by Wentz Bros. of Big Stone Gap, Va., to I. B. Williams of Richmond, Va.; Samuel Pardee of Philadelphia and others.

Knoxville, Tenn.—Mr. J. E. Willoughby, chief engineer of the Knoxville, La Follette & Jellico Railroad Co., informs the Manufacturers' Record that survey is being made for a branch up the Laurel fork of Cumberland river in Campbell county, Tennessee, and Bell county, Kentucky, to Chenoa, seven miles.

Laredo, Texas.—Another corps of engineers for the Mexican Central Railway are making a survey in the vicinity of Cameron Lake. Lewis Kingman is chief engineer at the City of Mexico.

Little Rock, Ark.—An amendment to the charter of the White River Railway Co. has been approved, authorizing its extension from Mt. Olive, Ark., to Carthage, Mo., 124 miles. This is a Missouri Pacific extension, and George E. Dodge of Little Rock has been elected president, and Simon Adler, vice-president. When completed to Carthage the line will, according to a report from Topeka, be extended to Pittsburg, Kan.

Little Rock, Ark.—The Leslie & Southern Railroad Co. has been incorporated, with \$3,000,000 capital, to build a line south from Leslie, the proposed terminal of the St. Louis & North Arkansas Railroad, to Little Rock, 120 miles. The directors are P. K. Roots, Alexander C. Hull, W. J. Perry and R. T. Cook of Little Rock, and Charles Gilbert, C. L. Leslie and George M. Sams of St. Louis. The incorporators also include Robert E. Walt and Col. J. W. Tillar of Little Rock, and S. W. Lee of Harrison. Mr. Lee is chief engineer of the St. Louis & North Arkansas.

Livingston, Ky.—Pennsylvania capitalists who have purchased 25,000 acres of timber and coal lands in Rockcastle and Jackson counties are reported to be surveying the Altamont & Manchester branch of the Louisville & Nashville Railroad to Pond Fork, in Jackson county, twelve miles. R. Montfort is chief engineer, Louisville, Ky.

Louisville, Ky.—An official of the Louisville & Nashville Railroad writes to the Manufacturers' Record confirming the report that the company is considering a plan to build a number of tracks at Bowling Green, Ky.

Louisville, Ky.—T. J. Minary, president of the Louisville Railway Co., is reported as saying that the company expects to have the lines to Valley Station and to Jefferson completed by June. A survey has been made for

the Jefferson line, and that for the Valley Station extension is being made.

Memphis, Tenn.—The St. Louis & San Francisco Railroad has bought fourteen acres of land at Kansas City Junction in Memphis and will, it is understood, build several miles of terminal tracks. C. D. Purdon is chief engineer at St. Louis, Mo.

Muskogee, I. T.—The Ozark & Cherokee Central Railroad has been completed to Fort Gibson. An extension is to be built from Fayetteville to Huntsville, Ark. E. W. Boynton is chief engineer at Fayetteville, Ark.

Nashville, Tenn.—It is reported that considerable new track will be laid by the Nashville Terminals, of which W. P. Bruce is superintendent.

New Martinsville, W. Va.—It is reported that the electric line to be built from Salem to Clarksburg will be extended to New Martinsville via West Union and Middlebourne. Homer McKinley, cashier of the Farmers and Merchants' Bank of Salem, and others are interested.

Palestine, Texas.—J. D. Trammel, chief engineer of the International & Great Northern Railroad, is quoted as saying that the branch from Navasota to Madisonville, forty-five miles, will be completed by June or July next. The grade is finished for about thirty miles. Also that the Houston, Beaumont & New Orleans road will be an air line between Houston and Beaumont, eighty miles, with a grade of thirteen feet to the mile.

Paris, Ky.—The court has granted a franchise to Claude M. Thomas, T. C. Clark and Webb Bratton for an electric line to Paris along the Paris and North Middletown, the Paris and Flat Rock, the North Middletown and Plum Lick and the Cane Ridge and North Middletown turnpikes.

Pine Bluff, Ark.—H. A. Parker, vice-president of the Rock Island system, has visited Pine Bluff, and it is reported that the company will build an extension to New Orleans, starting from either Benton or Malvern, Ark., and going via Fordyce and Crossett. W. E. Dauchy is chief engineer at Chicago, Ill.

Valdosta, Ga.—Col. W. S. West has been selected for president of the construction company that is to build a railroad north from Valdosta.

Washington, D. C.—W. H. Wells, engineer of construction Southern Railway, writes the Manufacturers' Record that surveys have been made to Cedartown, Ga., but that nothing definite has been decided about construction.

Winfield, Kan.—J. W. Beattie of Blackwell, Okla., is engineer for the proposed Winfield & Southern Railroad, of which W. C. Robinson of Winfield, Kan., is president.

Street Railways.

Chattanooga, Tenn.—Foster McFarland of Rossville will make the survey for the extension of the Chattanooga Electric Railway to Chickamauga Park.

Chattanooga, Tenn.—The Chattanooga Electric Railway Co. will, it is reported, improve the Alton Park Line with heavy steel rails. A large curve will also be eliminated.

Elizabeth City, N. C.—A survey for the street railway of the Electric Light Co. of Elizabeth City has begun. Carvel Hall is engineer and H. Clay Tunis, general manager.

Fort Worth, Texas.—Property-owners of Polytechnic Heights have raised \$3000, the amount necessary for widening the track of the narrow-gauge line, and the Northern Texas Traction Co., will, it is understood, make the improvement.

Jackson, Miss.—The charter of the Biloxi Electric Railway & Power Co. of Biloxi, Miss., capital \$120,000, has been approved.

Jackson, Miss.—The Jackson Belt Line Railway Co. has organized, with \$200,000 capital. It may build a street-car line in Jackson. The officers are J. B. Harris, president; Jones S. Hamilton, vice-president and general manager; John Hart, second vice-president; J. J. Conan, secretary, and F. B. Neal, treasurer. Directors are Messrs. Harris, Hamilton and Hart, R. B. Hamilton, J. A. Robinson and J. J. Evans.

Louisville, Ky.—The franchise intended to enable the Louisville Railway Co. to extend the Barret avenue line out Castlewood avenue from Hepburn avenue to the city limits will be sold at auction by the board of public works on January 2.

Monterey, Mex.—The Monterey Electric Railway Co. proposes to immediately build thirty miles of street railway. Sperry, Jones & Co. of Baltimore, Md., recently purchased the mule car lines in Monterey, and will convert them.

Nashville, Tenn.—The Nashville Railway has applied to the city council for permission to extend its Woodland-street line. Percy Warner is president.

Norfolk, Va.—The Norfolk Railway & Light Co. will, it is reported, build an extension at Berkley. E. C. Hathaway is general manager.

Seranton, Miss.—An option for a street railway given to Dr. L. S. Anderson has been extended to January 15. It is reported that he will also build the proposed line from Pascagoula to Ellisville.

South McAlester, I. T.—The Purcell & Lexington Street Railway Co., with \$100,000 capital, has been incorporated to build an electric railway between Purcell, I. T., and Lexington, Okla. The incorporators are William T. James, Thomas C. Woods and J. F. Sharp.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Agricultural Implements.—Gregorio Gomez, Gerez de la Frontera, Spain, wants catalogues of American agricultural implements.

Boating Timber.—See "Engines."

Boiler and Engine.—See "Mill Supplies."

Boilers.—Empire Lumber & Manufacturing Co., Jackson, Miss., will want two 75 or 100-horse-power boilers.

Boilers and Engines.—See "Electric-light Plant."

Boiler-tube Cleaner.—See "Steam Specialties."

Broom Machinery.—Jas. D. Shelby, Junction City, Ky., wants to correspond with makers of broom manufacturing machinery.

Cannery.—Jas. D. Shelby Junction City, Ky., wants to correspond with makers of cannery equipments.

Cannery.—White Canning Co., Oxford, N. C., will need 15 to 20-horse-power boiler, packing machine, labeling machine, soldering machine, etc., for complete plant of 5000 cans daily capacity.

Compresses.—Pollock & Bernheimer, 6 South Water street, Mobile, Ala., want to correspond with makers of hydraulic presses for baling dry goods.

Dairy Machinery.—Oklahoma Dairy & Ice Cream Co., Oklahoma City, O. T., will need machinery for freezing cream and handling milk.

Dry-dock.—Bureau of Yards and Docks, Washington, D. C., will open proposals March 14 for construction of steel floating dry-dock at naval station, Cavite, P. I. Information on application.

Electric-light Plant.—Toxaway Company, Brevard, N. C., will need electric-light plant, boilers, engines, etc.

Electric-light Plant.—Empire Lumber & Manufacturing Co., Jackson, Miss., wants estimates on electric-light plant for mill.

Elevator.—H. P. & J. Dils, Parkersburg, W. Va., will probably want electric freight elevator.

Elevators.—McCord & Adams, Winchester, Ky., are in market for electric freight elevator.

Engine.—W. H. Emerson, Brookhaven, Miss., is in market for Corliss engine, about 250-horse-power; second-hand preferred.

Engine.—Arkansas Valley Cotton Oil Co., Dardanelle, Ark., wants Corliss engine, not less than 250-horse-power; good second-hand will do.

Engine.—Thornhill Wagon Co., Lynchburg, Va., wants to buy 50-horse-power engine, Corliss preferred.

Engines.—Thunderbolt Marine & Navigation Co., Thunderbolt, Ga., will want gas-line engines and boat timber.

Excelsior Machinery.—R. C. Lumpkin, Fourth avenue, Rome, Ga., wants addresses of makers of excelsior manufacturing machinery.

Furniture (Steel).—Bids will be opened January 8 for furnishing steel furniture for courthouse at Hazlehurst, Miss., according to plans on file. Address J. B. Mayes, clerk.

Hotel Furnishings.—Toxaway Company, Brevard, N. C., will need furniture and furnishings, etc., for hotel.

Hydraulic Presses.—See "Compresses."
Indigo.—Laszlo Jeno, Budapest, Hungary, wants to buy chemically-pure indigo.

Machine-shop Equipment.—Baltimore & Annapolis Short Line Railroad, Phillip Cooper, engineer in charge, Annapolis, Md., will need engine, boiler, shop tools, etc., for shop.

Machine Tools.—Bridgeford & Co., Louisville, Ky., want second-hand eight-foot brake and a large lever shear, both suitable for working steel as heavy as No. 10. When writing give full description.

Machine Tools.—H. B. Bloom, Box 392, Charlotte, N. C., wants Barnes foot-power lathe; six-foot bed preferred, second-hand.

Metal Workers.—P. O. Box 483, Fayetteville, N. C., wants to correspond relative to having manufactured large quantities of specially-designed and constructed tools. Makers stamping sheet steel are especially asked to correspond.

Mill Supplies.—P. O. Box 1, Ronda, N. C., wants 500-inch water pipe, new or second-hand; also shafting, wood pulleys, couplings, hangers, etc.

Mill Supplies.—X. Y. Z., Box 156, Bevier, Mo., wants estimates on 20-horse-power engine and boiler for burning wood; second-hand will do; also estimates on shafting, pulleys and belting.

Motor.—See "Railway Equipment."

Oil-mill Machinery.—Arkansas Valley Cotton Oil Co., Dardanelle, Ark., wants to exchange four-set rolls for five-set rolls.

Steam Specialties.—Rock Hill Buggy Co., Rock Hill, S. C., wants tube-cleaner.

Pearl-button Machinery.—Automatic Button Co., Muscatine, Iowa, wants addresses of makers of machinery and tools used in manufacturing pearl buttons.

Piping.—See "Mill Supplies."

Railway Construction.—C. P. Howard, engineer in charge, Deepwater Railway Co., Beckley, W. Va., will open bids January 17 for graduation (including tunnels), trestle-work and masonry on twenty miles of railway. Blank forms, copies of specifications, etc., can be obtained on application.

Railway Equipment.—Seth S. Barnes, New Madrid, Mo., wants two or three miles of relay steel rails, with bolts and splices, about 35 to 60-pound rails; also wants light four or six-wheel saddle-tank switcher, standard gauge, for logging work.

Railway Equipment.—Donaldson Lumber Co., Charleston, W. Va., is in the market for about five miles of 20-pound T rails, new or relays; also for a 36-inch-gauge engine, direct-connected, and six logging cars, extension preferred.

Railway Equipment.—Summitville Lime Co., Summitville, Tenn., wants three-foot-gauge gasoline motor for hauling stone cars; motor to haul twenty to fifty tons.

Rice Mill.—Edw. A. Daugherty, 31 Marine Bank Building, Baltimore, Md., wants catalogues and price-lists of rice-mill equipment. Information as to a 500-barrel plant especially wanted.

Smelting Plant.—Ore Reduction and Smelting Co., 309 Equitable Building, St. Louis, Mo., will need engines, boilers, exhaust fans, positive blowers, pumps, small cars, track, tools, etc.

Sewerage System.—City of Lawton, O. T., will open bids January 2 for construction of sewerage system, after plans by W. S. Shields, 1715 Marquette Building, Chicago, and on exhibition at his office and at office of "City Clerk" at Lawton.

Trunk-factory Supplies.—Galbraith Trunk Co., 1113 Basin Bank, Richmond, Va., wants to buy trunk boxes ready for finishing.

Water-works.—City of Centerville, Miss., will open bids January 7 for construction of water-works after plans, etc., by C. H. Jenks of Fayette, Miss. Plans and specifications on view at mayor's office. Contractors will be required to give bond. For synopsis of specifications and other information address "The Mayor."

Water-works, etc.—The Electric Light Co. of Elizabeth City, Elizabeth City, N. C., will need water-works equipment and supplies, gas plant and supplies, electric-lighting machinery, pumps, engines, holders, etc. H. C. Tunis is general manager.

Well-drilling.—Board of public works, Georgetown, S. C., will open bids January 16 for boring an artesian well. For copy of specifications and other information address J. B. Steele, chairman of committee.

Wire Cable Cord.—Memphis Novelty & Manufacturing Co., 223 Second street, Memphis, Tenn., wants addresses of makers of small hemp wire cable cord, one-thirty-second and one-sixteenth inch, such as is used

for street-car window shades. Company will buy in large quantities.

Woodworking Machinery.—Texas Lumber Co., Nacogdoches, Texas, will want resaw, also planer and matcher to open 6x14 inches, second-hand.

Sold to the Government.—The Q & C Company has shipped from its factory at Chicago Heights, Chicago, Ill., one of its largest special metal-sawing machines to the United States government, to be used in the Cavite navy-yard at Manila.

TRADE LITERATURE.

Woodworking Machinery.—J. A. Fay & Egan Co., 277-280 West Front street, Cincinnati, Ohio, is mailing an attractive illustrated catalogue of some of its latest machines. This is well arranged, nicely printed and well illustrated.

Attractive Calendar.—The American Steam Gauge & Valve Manufacturing Co., Jamaica Plain (city sales office, 196 High street), Boston, Mass., sends us an attractive New Year's calendar. The American Gauge & Valve Manufacturing Co. manufactures gauges, valves, Thompson improved indicators, etc., and conducts an extensive business in these lines.

Effective Blotter.—A small blotter, containing a forceful testimonial from the Pemberton Manufacturing Co., Pemberton, Va., using one of its "Star" portable mills, has been received from B. F. Starr & Co., mill furnishers, North and Center streets, Baltimore, Md. The Pemberton Company states that the mill in question is giving entire satisfaction, and is grinding and making the best quality of meal at the rate of fourteen bushels per hour.

Engine Catalogue.—The Case automatic high-speed engine, made by the New Britain Machine Co., New Britain, Conn., is described in a catalogue just received from that firm. A number of interesting outfits showing the engine in connection with various makes of dynamos, pumps, fans, etc., are illustrated. The book is complete, and, devoting itself to small steam engines, as it does entirely, is unusual. This firm also manufactures chain saw mortisers and other patented woodworking machinery.

Thread Milling Machine.—A comprehensive pamphlet on the subject of thread milling has been received from Pratt & Whitney Company, Hartford, Conn. The arrangement and general appearance of this book are all that could be desired, the engravings being especially good. The thread milling machine described in the pamphlet possesses the flexibility and adaptability to miscellaneous thread cutting which this precise and accurate class of work demands. It does the work within narrow limits of error, and inexpensively.

About Castings.—The H. H. Franklin Manufacturing Co., Syracuse, N. Y., is mailing an unusual catalogue under the title "Finished Parts Made by a Process of Casting Which Avoids the Machine Work." This title is probably the longest sentence used in this book. The story, an interesting one, too, is told in a few crisp, short sentences, and is convincing. By this method castings are made and finished by one process, making it unnecessary to machine castings. This is especially adapted to making parts where great accuracy is demanded.

Christmas Catalogues.—The Western Electrical Supply Co., St. Louis, Mo., recently issued two attractive catalogues of seasonable articles. One illustrates a complete line of electrical toys, small motors and dynamos. These toys are miniature reproductions of large apparatus, mechanically and electrically perfect. The second catalogue illustrates miniature incandescent lamps and fittings, showing an especially fine line of socketless series lamps, which can be used to great advantage in decorating rooms and trees for Christmas. These catalogues will be mailed on application.

New Machines.—Since mailing its Twentieth Century catalogue the H. B. Smith Machine Co., Smithville, N. J., has brought out several new machines; these are described in a pamphlet intended for insertion in the catalogue which has just been received. The tenoning machine illustrated on this insert is single end, and has single heads; it is intended for use in sash and blind factories, cabinet shops, etc. The other machine is a quadruple blind stile mortising and boring machine, and is intended for the manufacture of both rolling and stationary blinds. The machine makes four holes or
[Continued on page 454.]

LOUISIANA & ARKANSAS RAILWAY COMPANY.

FIRST ANNUAL REPORT—FOR THE FISCAL YEAR ENDED JUNE 30, 1902.

Texarkana, Ark., November 10, 1902.

To the Stockholders and Bondholders of the Louisiana & Arkansas Railway Company:

The Louisiana & Arkansas Railway Company was incorporated in Arkansas on June 10, 1902, to extend the charter of the Louisiana & Arkansas Railroad, and on August 18 all of the property and assets of the latter corporation were taken over and its outstanding liabilities were assumed as of June 30. Both the capital stock and the funded debt of the Railroad have been retired, and new capital stock and bonds of the Railway Company have been issued. In this report, which covers the fiscal year ended June 30, 1902, the income account, with its resulting statements, and the traffic and transportation statistics, are those of the Railroad, but the present financial status, as set forth in the general balance sheet as of July 1, 1902, all current operations, and certain plans for extensions, as described below, pertain to the Railway Company.

The Louisiana & Arkansas Railroad was chartered on March 18, 1898, and within the next two years built or acquired 91.8 miles of standard-gauge railroad, extending from Stamps, Ark., on the St. Louis Southwestern Railway, 34 miles east of Texarkana, southerly and southeasterly in Arkansas and Louisiana to Ashland in the latter State. In the spring of 1902 an extension of 33.5 miles in the same direction to Winnfield, La., was completed, and the railroad as now operated is 125.3 miles in length. The average mileage operated in 1901 was 91.8 miles; in 1902, 97 miles.

Important plans for the extension of the Company's lines are now being carried out, as indicated on the accompanying map.

An extension of about 23 miles in length from Stamps northward to Hope, on the main line of the St. Louis, Iron Mountain & Southern division of the Missouri Pacific Railway system, 33 miles northeast of Texarkana, is under construction and will be finished in December. Surveyors are at work on a proposed extension of the main line southeastward from Winnfield about 52 miles to Alexandria, La., an important railroad and commercial center on the Red river, and the intention is to begin grading on this extension within thirty days. Grading is also in progress on the Jena Branch, which is to leave the main line from Winnfield to Alexandria at Packton, about 10 miles east of the former place, and to extend about 28 miles easterly from the junction at Packton to Jena. These additions, together with the road already in operation, will constitute a main line of railway about 200 miles in length, extending from Hope, Ark., southerly and southeasterly in the general direction of the Red river to Alexandria, with a branch of 28 miles from Packton to Jena. The extension of the Jena Branch eastward to Vidalia, La., on the Mississippi river, opposite Natchez, Miss., which city is reached by ferry, is contemplated, but will not be undertaken at present.

An extension of the Arkansas & Choctaw Division of the St. Louis & San Francisco Railroad system from its present terminus at Ashdown, Ark., eastward to Hope, is in course of construction. Upon the completion of this line and of your Company's extension to Alexandria, as above mentioned, now only a few months distant, the Louisiana & Arkansas Railway will become a member of a comprehensive system of railroad lines connecting New Orleans and the tributary points in the lower Mississippi Valley with the vast and rapidly-growing region to the northwest, including Central Louisiana, Southwestern Arkansas, Northeastern Texas, Indian Territory, Oklahoma, Kansas and all of the prairie country west of the Missouri river. The great strategic strength of the Company's position as the intermediate link between the Southern Pacific Company's lines in Louisiana south of the Red river and those of the St. Louis & San Francisco Railroad and its connections north and west of Hope will be gathered from a glance at the map. The development of a large amount of through traffic in both directions in lumber, coal, cotton and its products, grain, flour, live-stock and general merchandise, upon the completion of the New Orleans connection, is believed to be assured. For all business to be interchanged between the St. Louis & San Francisco system and any part of Louisiana, Mississippi and the Southeast the Louisiana & Arkansas will be the natural route of transportation.

The country traversed by your lines is healthful, and for the most part is admirably adapted for the raising of cotton, corn and live-stock. Cotton production is increasing steadily, and many of the stations have cotton gins. Industries manufacturing hardwoods are being established.

Situated on both sides of the southern part of the main line and of the Jena Branch is the largest and densest body of long-leaf yellow-pine timber now standing in the United States. North of the long-leaf region, and also traversed by the railroad, is an area of short-leaved pine of commensurate density and value. The natural market for the timber output of Louisiana and of Southwestern Arkansas is in the populous, but almost treeless, prairie country toward the Northwest—in Oklahoma, Kansas, Nebraska, Colorado and the region generally west of the Missouri river. All of this region is reached directly by the connections of the Louisiana & Arkansas Railway north and west of Hope. Large tracts of timber land both in the short-leaf and in the long-leaf belts are owned by the same persons that own the railway, and numerous large modern mills are at work along the line. The output of lumber absolutely tributary to the railroad for transportation, in addition to the transportation of logs, may be conservatively estimated at 250,000,000 to 300,000,000 feet per annum for not less than twenty-five years. On this traffic the Company secures profitable rates.

The railroad has first-class alignment and light grades. The embankments are generally good and cuts clean, the right of way is cleared throughout, rails and ties are in good condition, bridges are few and in good repair, and the buildings are sufficient for the requirements.

MILEAGE.

At the beginning of the fiscal year 1902 the Company operated 91.8 miles of line, connecting Stamps, Ark., with Ashland, La. The extension from Ashland southeasterly toward Alexandria, La., and Natchez, Miss., was opened for bus-

ness to Goldonna, 109 miles from Stamps, in March, and to Winnfield, 125.3 miles from Stamps, at the close of the year. Construction was begun about July 1 on the extension northward from Stamps to Hope, about 23 miles, and somewhat later on the extensions from Winnfield southward to Alexandria and eastward to Jena. A summary of the mileage built and building, as shown on the accompanying map, is as follows:

	Miles.
In operation June 30, 1902, Stamps, Ark., to Winnfield, La.....	125.3
Now under construction, Stamps, Ark., to Hope, Ark.....	23.0
Winnfield, La., to Jena, La.....	38.0
Under survey, Packton, La., to Alexandria, La.....	61.0
Total.....	228.3

Average miles operated in 1901, 91.8 miles; 1902, 97 miles. Gauge, standard, 4 feet 8½ inches; rails, 60-pound steel. All orders for new rails are for 75-pound steel.

INCOME ACCOUNT.

The detailed income accounts of the fiscal years ended June 30, 1901 and 1902, respectively, are condensed in the following comparative statement:

	1902.	1901.	Increase.	Increase,
				per cent.
Gross earnings.....	\$478,531	\$316,746	\$161,785	51.08
Operating expenses and taxes.....	200,072	176,232	23,840	13.53
Net earnings.....	\$278,459	\$140,514	\$137,945	98.20
Reserves for replacements, etc.....	35,502	22,038	13,464	61.09
Total net income.....	\$242,957	\$118,476	\$124,481	104.25
Interest.....	33,001	15,619	17,382	111.28
Surplus.....	\$149,956	\$102,857	\$47,099	45.79

The present funded debt of the Louisiana & Arkansas Railway Company is \$1,500,000, including \$250,000 of bonds sold, but not yet issued. The annual interest charge at 5 per cent. is \$75,000. This sum is equivalent to 40.99 per cent. of the net earnings applicable to interest in the fiscal year 1902.

Details of the income account will be found on page 14 of pamphlet report. Comparative figures are given for two years, but are not carried further back, because the recent additions to the mileage render comparisons extending over a longer period of little value.

Gross earnings, operating expenses (including taxes, reserves for replacements and other deductions) and net earnings per mile of road for the last two years compare as follows:

	1902.	1901.	Increase.	Increase,
				per cent.
Average miles operated.....	97	91.8	5.2	5.66
Gross earnings.....	\$4,333 32	\$3,459 39	\$873 93	25.27
Operating expenses and taxes, etc.....	3,047 16	2,159 81	887 35	41.08
Net earnings.....	\$1,286 16	\$1,299 58	-\$13 42	-1.03

The funded debt of the Louisiana & Arkansas Railway Company as it now exists—\$1,500,000, as stated above—amounts to \$11,971 per mile of road. The annual interest charge on the funded debt per mile of road is \$598.55, as against net earnings available for interest, amounting to \$1886 per mile in 1902, \$1291 per mile in 1901 and \$1588 per mile as the average of the two years.

CAPITAL STOCK.

The authorized capital stock of the Company is \$2,250,000, of which \$1,750,000 is outstanding.

FUNDED DEBT.

For the purpose of providing means with which to satisfy its obligations incurred in connection with the taking over of the Louisiana & Arkansas Railroad, to acquire and construct additional shops and stations, to make certain improvements to its roadbed, to purchase additional rails and rolling stock, to acquire, purchase and construct additional lines of railroads and branches, and to provide for the general purposes of the corporation, the Company executed on September 1, 1902, its First Mortgage to the Standard Trust Company of New York, as trustee, to secure an issue of \$7,000,000 of 5 per cent. 25-year gold bonds. The appropriation of the bonds secured under this mortgage (Article I), the issue being limited to an amount not to exceed an average of \$20,000 per mile of completed railroad, is as follows:

Section 2.—For general purposes of the Company and for satisfying its obligations.....	\$1,500,000
Section 3.—For the purchase, construction or acquisition of extensions, branch lines and extensions thereof.....	4,000,000
Section 4.—For the purchase and acquisition of additional rolling stock, and to provide for improvements and betterments.....	500,000
Section 5.—For the construction or acquisition of a bridge across the Black river and a bridge across the Red river.....	1,000,000
Total.....	\$7,000,000

Under Section 2 bonds to the amount of \$1,250,000 have been sold and issued, and the remaining \$250,000 have been sold, but not issued.

The entire issue, but no part, will be subject to redemption at 110 and accrued interest on any interest day after September 1, 1907. Beginning with 1907, the bonds will be entitled to the benefit of a sinking fund of \$55,000 per annum, to be used by the Trustee in the purchase of bonds at a price not to exceed 110 and accrued interest. Should it be impossible to purchase bonds at this rate, the sinking fund may be invested in securities in which savings banks at that time

LOUISIANA & ARKANSAS RAILWAY COMPANY—GENERAL BALANCE SHEET AS OF JULY 1, 1902. (After Acquiring Property of Old Company.)

Assets:	
Cost of road.....	\$2,145,606 59
Cost of equipment.....	228,454 99
Material and supplies.....	37,776 60
First mortgage bonds in treasury.....	\$1,500,000 00
Less amount required to retire bonds of old Company.....	636,000 00
Total capital and invested assets.....	\$3,275,838 18
Equipment purchased under contract—per contra.....	24,075 00
Cash on hand.....	\$111,743 83
Cash with financial agents.....	18,000 00
Due from individuals and companies.....	46,816 35
Due from agents and conductors.....	3,084 49
Unexpired insurance.....	3,020 02
Total working assets.....	182,664 69
Total assets.....	\$3,458,502 87

are authorized to invest according to the laws of New York, New Jersey, Massachusetts or Connecticut.

A full description of the bonds will be found on page 18 of pamphlet report.

MAINTENANCE OF WAY AND STRUCTURES.

The outlays for maintenance of roadway, bridges and structures charged to operating expenses averaged \$783 per mile of road, and were adequate. In addition to these expenditures and the expenditures for maintenance of equipment mentioned below, a sum equivalent to \$224 per mile of road was charged directly to income and set apart as a reserve fund for replacements.

About 33 miles of main line track, extending from Stamps, Ark., to mile-post 33, were relaid with new 60-pound rails, replacing 45-pound rails, which were used subsequently in the construction of spurs and sidings. The cost of taking up the 45-pound rails and relaying with 60-pound was charged to operating expenses. The entire main line is now laid with 60-pound rails.

During the fiscal year 25,744 ties, or about 10 per cent. of the entire number in the main line, were placed in the track as renewals. Provision has been made for 46,000 ties.

During the year extensive repairs and renewals were made upon the bridges on the entire line, and they are now in first-class condition. Thirty-six miles of right of way have been fenced during the year, making a total of 48 miles fenced. The fencing decreases the liability for loss from the killing of live-stock.

Most of the side tracks laid before July 1, 1901, were lengthened in order to provide better facilities for trains meeting each other.

Various buildings have been erected during the year along the right of way for the accommodation of freight traffic. Special mention should be made of the new joint depot at Stamps, in connection with the St. Louis Southwestern Railway, erected at an approximate cost of \$8000, one-half of which was paid for by this Company. This handsome building is commodious in every way for the handling of the freight traffic exchanged at this station, besides having ample accommodations for passengers. A two-story office building was also put up at Stamps at an approximate cost of \$3000, for the accommodation of the superintendent and his staff, the roadmaster, train dispatcher and trainmaster.

The expenditures of the year for additions and betterments charged to capital accounts amounted to \$43,327.

A large Railroad Young Men's Christian Association building has been completed at Stamps. Great benefit will be derived from it by the employees of this Company and of the Bodcaw Lumber Company. The two companies contributed \$1750 toward the cost, and about \$2000 was subscribed by employees and other citizens.

MAINTENANCE OF EQUIPMENT.

The equipment is all in first-class condition. All freight cars except skeleton logging cars are equipped with automatic couplers and air brakes. The amounts charged to operating expenses for repairs and renewals of rolling stock, on the basis of the equipment list at the beginning of the year, averaged \$1366 per locomotive, \$436 per passenger car and \$41 per freight car.

Orders have been placed with the American Car & Foundry Company for 100 box cars for December delivery and for 3 passenger coaches and 2 combination mail and baggage cars for delivery in January and August, 1903, and with the Baldwin Locomotive Works for 8 locomotives for August, 1903, delivery.

TRAFFIC AND OPERATING RESULTS.

The Company's income account reflects the general prosperity of the communities and the industries tributary to the line. Of the increase of \$161,786 in gross earnings, \$150,732 was derived from freight, \$10,053 from passengers and the remainder from mail, express and miscellaneous sources. Freight earnings increased 53.51 per cent. and passenger earnings 46.95 per cent. The increase in gross earnings per mile of road was equivalent to 42.97 per cent.

Earnings from freight amounted to \$4457 per mile of road in 1902, as against \$3068 per mile in 1901; earnings from passengers to \$345 per mile, as compared with \$248.

Freight earnings averaged 1.83 cents per ton per mile, and passenger earnings 3.10 cents per passenger per mile.

The average freight-train load, company freight included, was 161 tons.

Freight earnings per freight-train mile averaged \$2.91; passenger-train earnings per passenger-train mile averaged 57 cents.

IN GENERAL.

Attention is called to the report of the Auditor presenting detailed statements of earnings, financial condition, operating results, etc., on subsequent pages. The books and accounts have been audited by Messrs. Patterson, Teele & Dennis of New York, certified public accountants, and their certificate appears on the following page.

The Board desire to express their acknowledgment of the faithful services of the Company's officers and employees during the past year.

By order of the Board,

WM. BUCHANAN,
President.

Liabilities:	
Capital stock.....	\$1,750,000 00
First mortgage bonds—present issue.....	1,500,000 00
Total capital liabilities.....	\$3,250,000 00
Equipment contract—per contra.....	24,075 00
Reserves—Rails.....	\$15,068 74
Ties.....	19,217 22
Equipment.....	23,307 62
Loans and bills payable.....	\$20,000 00
Audited vouchers.....	14,586 38
Unpaid wages.....	19,543 94
Due to individuals and companies.....	17,547 14
Accrued liabilities and taxes.....	\$1,881 83
Miscellaneous interest.....	450 00
Coupon interest due July 1, 1902.....	2,331 83
Amount due to stockholders of old Company in liquidation.....	18,000 00
Total working and reserve liabilities.....	151,009 29
Total liabilities.....	\$3,401,009 29

[Continued from page 452.] makes two mortises and bores two holes at one operation. The vises described are intended for machine shops or for repair shops of woodworking plants.

Dixie Cement.—The Chickamauga Cement Co., Chattanooga, Tenn., is mailing a folder containing tabulated results of tests made on Dixie rock cement. The tests were made on briquettes selected at random from among others; they were kept one day in air and the rest of the time in water. The results show that in time this natural cement will become very hard. It is made from good materials, and by modern methods; it is uniformly burned and finely ground. Mixed with two parts clean, sharp sand to one part cement, it is said to give a tensile strength averaging 150 pounds one day in air and six days in water.

Wire-Rope Tramways.—An interesting book on wire-rope tramways has been received from the Trenton Iron Co., Trenton, N. J., manufacturer of iron and steel, wire and wire rope, rods, wire-rope tramways, etc. This is a revised reissue of a former publication on this subject, with new text and illustrations, directing especial attention to the merits of the patent locked-coil track cable and Webber patent compression grip with patent automatic attacher (used only on Bleichert tramways), so that it will appeal to persons investigating economical methods of transportation with the interest of a new book. It will be mailed free to interested parties.

IN SOUTH AFRICA.

Work of the Manufacturers' Record in the English Colony.

Mr. William A. Haygood, P. O. Box 227, Port Elizabeth, Cape Town, South Africa, writes to the Manufacturers' Record:

"In connection with the general agency I am establishing for American machinery, the Manufacturers' Record has put me in touch with manufacturers in the following lines, among others: Brick-making machinery, machinery for pipes and tiles, portable tramway and wire-rope-conveying machinery, electric-light outfitting companies, laundry machinery, ice-making machinery, etc. I had the pleasure of placing orders for a large brick-making plant. I was working on a laundry plant, but an English firm got the order before I could get detailed estimates. I have three other laundry customers on the string, and expect to land at least one of them about the first of March. I have begun negotiations for electric-light plant for town of 8000 inhabitants. I have opened up correspondence with American engineers and electricians to send experts here to enable me to bid on water supply, drainage and electric-lighting of a large city which has voted a bond issue of \$3,500,000 for this purpose. All of this correspondence is with advertisers in the Manufacturers' Record.

"There is a rare opportunity here for the establishment of a great tannery. This is one of the largest hide-exporting ports in the world. A large shoe factory and a large saddle factory should accompany the tannery. Millions of pounds of hides are shipped over sea, tanned, manufactured into shoes, saddles, etc., and shipped back.

"A trunk factory and a coffin factory would pay wonderfully. The wood for these should be prepared in America, shipped, knocked down and put together here. Timber is very scarce and prices for plank high. A few expert hands should accompany each plant.

"Graduates of our American technological schools whose fathers can book them for a few thousands can make fortunes in purely industrial lines. For instance, the clay-working plant I am placing will keep within the colony next year over \$500,000 which would otherwise go abroad. The saving in freight alone is an attractive profit. I am always glad to see and examine the Manufacturers' Record."

FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Review of the Baltimore Market.

Office Manufacturers' Record, Baltimore, Md., December 23.

A rapid recovery in the price of Atlantic Coast Line common was the feature of the Baltimore market since Wednesday last. After selling down to the lowest point on Thursday the shares recovered ten points, with a sharp upward rush on Friday, and while most of the gain was lost, there was a subsequent wave of better feeling, which carried the price not far below the top notch. The cause of this recovery was ascribed to the general belief that the stock had been selling too low, and the advance was accompanied by a rapid improvement in the market value of the subscription rights. After the expiration of the rights, which came with the payment of first instalment on Saturday, the price for the shares was steadier. There was a little activity in Seaboard securities, but the movement was within narrow limits, although the tone was better. United Railways issues were moderately active considering the general dullness produced by continued high money, and G. B. & S. Brewing securities also figured to some extent in the dealings. Trust and bank stocks were quiet, and investment issues continued in fair demand.

In the dealings Atlantic Coast Line common began the period at 130, dropped to 129½, and then leaped upward at one bound to 135, which was followed by another jump to 140, from which point there was a gradual reaction to 133 and a subsequent advance to 136½, with a fractional decline to 135½. The new stock, with the first instalment paid, selling first at 38½, rose to 41, from which there was a reaction to 39½ and a recovery to 40. The rights of subscription sold from ¾ up to 4, reacted to 1½ and recovered to 3. Seaboard common was traded in between 25½ and 26, and the preferred between 42 and 44; the 4 per cent. bonds at 82½ to 83½, and the 5 per cent. bonds at 101½ to 102½. United Railways common changed hands from 13¾ down to 13, recovering fractionally, and the income bonds gradually advanced from 65½ to 66½; the 4 per cent. bonds were steady between 94½ and 94¾. United Light & Power preferred was neglected, but the 4½ per cent. bonds sold at 83½. Consolidated Gas moved upward from 70 to 70½; the 6 per cent. bonds changed hands at 112, and the 5 per cent. at 114 and 114½. There was no trading in Cotton Duck issues. G. B. & S. common sold at 12¼ to 12½; the income bonds at 35 to 36; income scrip at 34 and 34½, and the 1sts from 48½ to 49½.

Mercantile Trust sold at 165, Union Trust at 70 and Maryland Casualty at 53; Howard Bank at 12½, Bank of Commerce at 28 and Citizens' Bank at 30¾.

Other securities traded in were as follows: Alabama Consolidated Coal & Iron, 36 to 37; do. do. preferred, 86; Nashville Railway, 4½; Firemen's Insurance, 22½; Carolina Central 4s, 97; Georgia & Alabama Consolidated 5s, 111; Potomac Valley 5s, 118; Northern Central stock, 115; Atlantic Coast Line new 4s, 87 and 88; Atlantic Coast Line of Connecticut, voting trust, 310; Canton Company, 100; Baltimore City 5s, 1916, W. L., 121½; North Baltimore 5s, 119½; South Bound 5s, 111½; Security Storage & Trust, 105; Georgia & Pacific 1sts, 127; City Passenger 4½s, 102½; Charleston Consolidated Electric 5s, 88.

SECURITIES AT BALTIMORE.

Last Quotations for the Six Days Ended December 23, 1902.

Railroad Stocks.	Par.	Bid.	Asked
Georgia Sou. & Fla. 1st Pref.	100	102	102
Georgia Sou. & Fla. 2d Pref.	100	82	82
United Railways & Elec. Co.	50	13¼	13½
Seaboard Railway Common	100	25½	26½
Seaboard Railway Preferred	100	41½	42½
Atlantic Coast Line of Conn.	100	280	335

Bank Stocks.

Citizens' National Bank	10	31½	
Commercial & Far. Nat. Bank	100	135	
Farmers & Mer. Nat. Bank	40	72½	
First National Bank	100	160	
German Bank	100	107½	
Manufacturers' National Bk.	100	100	
Merchants' National Bank	100	135	
National Bank of Baltimore	100	125	
National Exchange Bank	100	195	
National Howard Bank	10	11½	
National Marine Bank	30	37	
National Mechanics' Bank	10	31	33½
National Union Bank of Md.	100	117	
Second National Bank	100	150	

Trust, Fidelity and Casualty Stocks.

American Bonding & Trust	50	85	
Continental Trust	100	215	
Fidelity & Deposit	50	160	
International Trust	100	148	
Maryland Trust	100	210	
Mercantile Trust & Deposit	50	160	165½
Union Trust	50	69½	
U. S. Fidelity & Guaranty	100	147	150

Miscellaneous Stocks.

G. B. & S. Brewing Co.	100	12	
United Elec. L. & P. Pref.	50	36	39½
Cotton Duck Voting Trust	100	4	8
Consolidation Coal	100	84	
George's Creek Coal	100	110	114
Consolidated Gas	100	70	71
Alabama Con. C. & I. Com.	100	36½	37
Alabama Con. C. & I. Pref.	100	88	

Railroad Bonds.

Atlanta & Charlotte 1st 7s, 1907	113		
Columbia & Greenville 1st 6s, 1916	118½		122½
Georgia, Car. & North 1st 5s, 1929	112½		112½
Georgia South. & Fla. 1st 5s, 1945	115½		115½
Georgia Pacific 1st 6s, 1922	127		127
Raleigh & Augusta 1st 6s, 1926	125		125
Richmond & Danville Gold 6s, 1915	119		121½
Seaboard & Roanoke 6s, 1916	105		105
Southern Railway Con. 5s, 1904	118		118
Virginia Midland 5th 5s, 1926	115		115
West Virginia Central 1st 6s, 1911	113¾		113¾
Charleston City Railway 5s, 1923	106½		108
Charleston Con. Electric 5s, 1899	86½		90
Newport News & Old Pt. 5s, 1908	108½		108½
Norfolk Street Railway 5s, 1944	112		112
United Railways 1st 4s, 1949	94½		94½
United Railways Inc. 4s, 1949	66½		66½
Seaboard 4s	83		83
Seaboard 10-year 5s	102		102½
Lexington Railway 1st 5s	100		104
Georgia & Alabama Con. 5s	110½		111½

Miscellaneous Bonds.

Mt. V. & Woodby Cot. Duck 5s	77	80	
Mt. V. & Woodby Cot. Duck Inc.	26	29	
G. B. & S. Brewing 1st 3-4s	49	49½	
G. B. & S. Brewing 2d Income	35	35½	
United Elec. Light & Power 4½s	83½	84	
Consolidated Gas 6s, 1910	112		
Consolidated Gas 5s, 1939	114½		115

The Louisville, Henderson & St. Louis Railway reports for October gross earnings \$72,356, increase \$8500; expenses \$45,806, increase \$415; net earnings \$26,550, increase \$8095. For four months gross earnings \$278,675, increase \$32,607; expenses \$180,429, increase \$7332; net earnings \$98,246, increase \$25,275.

The Louisville & Nashville Railroad reports for October gross earnings \$3,156,572, increase \$381,268; expenses \$2,033,089, increase \$187,500; net earnings \$1,123,483, increase \$193,768. For four months gross earnings \$11,525,828, increase \$1,557,077; expenses \$7,834,621, increase \$866,533; net earnings \$3,691,207, increase \$690,544.

The Gulf & Ship Island Railroad Co. reports for September gross earnings \$134,775, increase \$28,377; operating expenses \$90,938, increase \$13,252; net earnings \$43,837, increase \$15,125. From July 1 to September 30 gross earnings \$403,203, increase \$90,267; operating expenses \$266,136, increase \$24,782; net earnings \$137,067, increase \$65,485.

The St. Louis Southwestern Railway Co. reports for October gross earnings \$779,740, increase \$4997; operating expenses \$459,241, decrease \$22,365; net earnings \$340,499, increase \$27,362. From July 1 to October 31 gross earnings \$2,485,135, increase \$32,279; operating expenses \$1,678,975, decrease \$135,861; net earnings \$806,160, increase \$168,140.

The St. Louis & San Francisco Railroad system reports for October gross earnings \$2,348,520, increase \$170,708; operating expenses \$1,377,167, increase \$269,026; net earnings \$971,353, decrease \$98,318; other income \$3887, increase \$7762; total income \$975,240, decrease

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\$90,556; charges \$542,501, increase \$61,117; surplus \$432,739, decrease \$151,673. From July 1 to October 31 gross earnings \$8,349,999, increase \$914,595; operating expenses \$5,069,547, increase \$972,551; net earnings \$3,280,452, decrease \$57,956; other income \$48,626, increase \$38,540; total income \$3,329,078, decrease \$19,396; charges \$2,142,422, increase \$494,321; surplus \$1,186,656, decrease \$513,717.

It is officially announced that the assessed value of property in North Carolina has increased in one year \$40,512,768. Mecklenburg county leads in property valuation at \$14,737,876.

[For Additional Financial News, See Pages 30 and 31.]

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